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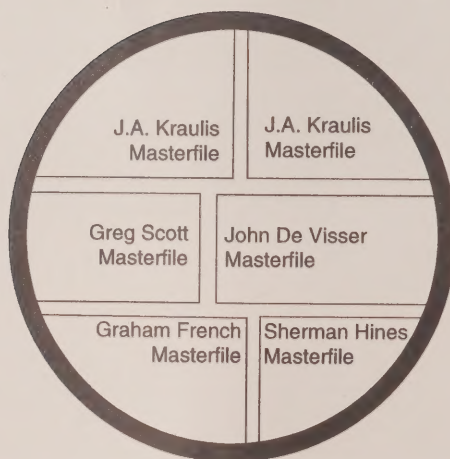
CEPA REVISITED

REPORT OF THE HOUSE OF COMMONS STANDING COMMITTEE
ON ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

JUNE 1995



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HOUSE OF COMMONS

Issue No. 81

Tuesday, June 13, 1995

Chairperson: Charles Caccia

CHAMBRE DES COMMUNES

Fascicule n° 81

Le mardi 13 juin 1995

Président: Charles Caccia

Minutes of Proceedings of the Standing Committee on

Environment and Sustainable Development

Procès-verbaux du Comité permanent de l'

Environnement et développement durable

RESPECTING:

Pursuant to its Order of Reference dated June 10, 1994:
Review of the Canadian Environmental Protection Act
(CEPA)

CONCERNANT:

Conformément à son Ordre de renvoi du 10 juin 1994:
Révision statutaire de la Loi canadienne sur la protection de
l'environnement (LCPE)

WITNESSES:

(See end of document)

TÉMOINS:

(Voir fin du document)

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ORDER OF REFERENCE

Extract from the Journals of the House of Commons of Wednesday, June 7, 1995

By unanimous consent, it was ordered,—That, pursuant to its Order of Reference dated Friday, June 10, 1994, the date for the Standing Committee on Environment and Sustainable Development to present its report to the House on its review of the Canadian Environmental Protection Act be extended to June 20, 1995.

Extract from the Votes & Proceedings of the House of Commons of Friday, June 10, 1994:

Ms. Copps (Minister of the Environment), seconded by Mr. Lastewka (St. Catharines), moved,—That the Standing Committee on Environment and Sustainable Development be designated as the committee referred to in section 139 of the Canadian Environment Protection Act. (*Government Business No. 13*)

ATTEST

ROBERT MARLEAU
The Clerk of the House of Commons

**THE STANDING COMMITTEE ON ENVIRONMENT
AND SUSTAINABLE DEVELOPMENT**

has the honour to present its

FIFTH REPORT

Pursuant to its Order of Reference of June 10, 1994, your Committee undertook a review of the Canadian Environmental Protection Act and presents its recommendations to the House.

ACKNOWLEDGEMENTS

Section 139 of the *Canadian Environmental Protection Act* (CEPA) stipulates that within five years of enactment, a Parliamentary committee is to undertake a comprehensive review of the provisions of the Act. Pursuant to an Order of Reference dated June 10, 1994, the House of Commons Standing Committee on Environment and Sustainable Development was charged with the task of conducting such a review.

An exhaustive study of a topic as complex as the *Canadian Environmental Protection Act* requires the cooperation of many individuals and organizations. The Committee is indebted to the hundreds of witnesses who responded to its invitation for submissions. The Committee was impressed with the quantity and quality of the material received. It is the Committee's hope that this report addresses many of the issues that were raised.

The Committee wishes to express its appreciation to the Department of the Environment for its support and cooperation throughout the review. The Overview of the Issues Document, the CEPA Evaluation Report commissioned by the Department and prepared by Resource Futures International (RFI) and the eighteen Elaboration Papers that suggested options for reform of CEPA were of great assistance to the Committee and its staff. The Department must also be commended for establishing a CEPA Office to assist the Committee in its work.

A task such as this could not have been undertaken without a devoted personnel. The Committee wishes to acknowledge the dedication, perseverance, and professionalism of the Library of Parliament Research team composed of Pascale Collas, Tom Curran, Monique Hébert and Margaret Smith. The Committee benefited immensely from the sound advice and professional services of its consultants, François Bregha and John Moffet from RFI. The Committee was also most fortunate to obtain the services of Ruth Wherry seconded from CEPA Office to participate in the drafting of the report.

The Committee also wishes to acknowledge the clerk, Norm Radford, and his staff for the administration and support throughout the year. The clerk's judicious advice and planning skills allowed the committee to overcome many obstacles.

Finally, we wish to thank the Publication Services of the House of Commons for the long hours of work, the Translation Bureau for meeting impossible deadlines, the French and English editors, and all of the other individuals, without whose assistance, this report would not have been possible.

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PREFACE

Every day, large numbers of toxic substances enter the environment as a result of human activity. Some of them are very dangerous. Canadians and their environment need and expect to be adequately protected from these substances by their government, particularly in such a vast country with so many jurisdictions.

In 1988, the Parliament of Canada passed the *Canadian Environment Protection Act*, (CEPA), aimed at protecting human health and ecosystems. On June 10, 1994, the Government requested the Standing Committee on Environment and Sustainable Development to review the effectiveness of this law and recommend changes, to strengthen it.

Over the past twelve months the Committee has listened and learned, guided by the belief that public health and healthy environment are pre-conditions for a sound economy. Speakers from interested sectors made their views known and in particular the aboriginal community made quite an impression on Committee Members, when they spoke about the necessity of acting in the interest of the next seven generations.

Some witnesses spoke to us about the serious deterioration of water, air, soil and fish, comparing today's conditions with their childhood recollections. In the North, Elders gave us heart-rending testimony about the damage caused by local and long-range transboundary pollutants.

In the following pages we hope Canadians will find what they expected: strong recommendations reflecting a wide range of interests and values, from public health to natural resource use, from aboriginal lifestyles to environmentally sustainable development. We believe, that if adopted, those recommendations will go a long way towards making CEPA the effective legislation it was intended to be.

For all the above reasons this report is not for procrastinators, the faint-hearted, nor those who have lost faith in the efficacy of government. It is written instead for those who believe that the protection of the public good is entrusted by people to their governments. We in turn are now entrusting our recommendations to our fellow-Parliamentarians and the Government of Canada.

Charles Caccia,
Ottawa, Spring 1995

EXECUTIVE SUMMARY

CHAPTER 1: THE FEDERAL ROLE IN ENVIRONMENTAL PROTECTION

This Report is based on the Committee's assertion that effective environmental and human health protection in Canada requires the federal government to play a strong leadership role. This role is multi-faceted. At a general level, it requires the federal government to promote sustainable development by integrating environmental, economic and social considerations in all federal policies and decisions. The federal government also has an important role to play in protecting Canada from international environmental threats, and in participating in international trade and environment negotiations to ensure that Canada retains its ability to provide a high level of human health and environmental quality to all Canadians.

There are three main aspects to the federal role with respect to environmental standard setting. First, the federal government should promulgate national standards for areas under federal jurisdiction and for issues of "national concern", such as toxic substances. Second, it should promote the establishment of national standards in areas requiring inter-jurisdictional cooperation. Third, it should lead cooperative efforts to minimize unnecessary overlap and duplication and to harmonize to the highest possible standard the various provincial, territorial, aboriginal and national environmental management regimes.

Both because of the tremendous environmental impact it exerts as Canada's largest enterprise and because of the important symbolic benefits, the federal government must also demonstrate exemplary federal stewardship in its own activities and in controlling activities on federal lands.

Finally, in support of the above, the federal government should continue to act as the main source of support for environmental science in Canada and should provide information about and promote the development and use of "best practices" throughout Canadian society.

CHAPTERS 2 & 3: CEPA – HISTORY AND DESCRIPTION AND THE NEED FOR CHANGE

Despite the activity that has taken place under CEPA, Canada continues to be burdened with growing environmental problems caused by toxic substances, hazardous wastes and pollution of air and water.

New developments and trends in environmental thinking are quickly overtaking CEPA. The increasing globalization of environmental issues, linkages between trade and the environment, and international approaches to the development of environmental standards all have an impact on the Act. Moreover, concepts such as sustainable development, pollution prevention and the ecosystem approach to risk assessment, in their infancy when CEPA was proclaimed, are becoming important principles of environmental management, both domestically and internationally.

In light of these developments, the thrust of the Committee's study has been to develop a new approach for CEPA and to operationalize these and other concepts throughout a revised Act.

CHAPTER 4: GUIDING PRINCIPLES FOR AN EFFECTIVE CEPA

In the proposed new approach, CEPA has an overarching policy goal - to contribute to sustainable development. The central principles that support this goal include pollution prevention, the ecosystem approach, biodiversity, the precautionary principle, and user/producer responsibility. These principles form the foundation of the proposed revisions to the statute.

A major shift in emphasis is required in CEPA, from managing pollution after it has been created, toward preventing pollution in the first place. The Act should be administered in a manner that helps maintain the functional integrity of ecosystems, including associated biological diversity. Precautionary measures based on the weight of evidence should be taken in the face of scientific uncertainty. The onus should be on the proponent or producer to demonstrate that substances are safe.

CHAPTER 5: THE ASSESSMENT OF SUBSTANCES

The assessment of substances for toxicity is a core mission of CEPA because a substance must be designated “toxic” before it can be regulated under the Act. There is a need for a more efficient assessment process for substances under CEPA. A major recommendation, therefore, is to change CEPA’s definition of “toxic” to include *both* risk assessment and hazard assessment. This will give the Minister of the Environment greater flexibility to deal with toxic chemicals in the Canadian environment.

Based on this revised definition, the Act should establish three tracks for assessing and managing toxic substances. Under Track 1, CEPA should establish a presumption of sunseting for: a) any substance that is sunsetted or banned in a Canadian province or a member nation of the Organization for Economic Cooperation and Development (OECD); and b) any substance which is *persistent, bioaccumulative and inherently toxic*. Proponents will have the right of appeal in these cases.

Track 2 would establish a presumption of a “toxic” designation for any substance that is regulated in any Canadian province or in any member nation of the OECD, unless the proponent can show extraordinary reasons why the substance should not be regulated.

Finally, Track 3 would involve the ongoing assessment of existing substances through a continued Priority Substances List (PSL) process. The PSL program should be refocused to include more classes of substances, effluents and waste streams. That program would also benefit from a “stop-clock” provision applied to those substances for which insufficient information exists to complete an assessment. If the needed information is not forthcoming, the Minister of the Environment should have the authority to declare the substance “toxic” under the Act.

New substances should be assessed under the principle of user/producer responsibility: new substances should be banned from Canada until the proponent has demonstrated that they do not pose an unacceptable risk to the environment or human health. This requirement also applies to contaminants and other unintentional constituents of new substances.

CEPA should ban all new substances that are persistent, bioaccumulative and inherently toxic, unless a proponent can demonstrate extraordinary reasons to authorize its use for specific purposes. A new

substance that is banned in a Canadian province or in an OECD country should also be deemed banned under CEPA. Finally, all new substances assessed to be “toxic” under CEPA would be permitted into Canada only where the proponent can demonstrate an extraordinary need for specific uses, to be defined by regulation.

There is a need for faster action once a substance has been designated “toxic” under CEPA. The Act should require the government to promulgate appropriate measures within two years of assessing a substance as toxic.

A continuous flow of information is necessary to ensure that regulatory and other actions under CEPA are consistent with new circumstances. CEPA should require users and producers to submit all pertinent new information on a substance to the Minister on an ongoing basis, particularly any significant new uses. This requirement should apply to all existing substances, including those previously assessed as “not considered toxic” under CEPA.

CHAPTER 6: POLICIES AND TOOLS FOR PREVENTING POLLUTION FROM TOXIC SUBSTANCES

CEPA should provide a key legislative base for promoting pollution prevention in Canada. This will require a major shift in emphasis. The transition to pollution prevention will be an on-going process and, in some cases, control and remediation will remain the best available options for environmental protection. However, preventive measures *must* become the first priority in environmental protection. Pollution control should be considered only as an interim measure until a pollution- prevention regime is put in place.

CEPA can promote the shift to pollution prevention in two ways. First, CEPA can require and/or authorize strategies and tools to prevent and control pollution from substances declared, or deemed, toxic under the Act. These include mandatory pollution prevention plans, economic instruments, voluntary measures, and sunseting. Second, the Act should authorize strategies to promote and facilitate voluntary adoption of pollution prevention throughout Canadian society. These include model pollution-prevention plans, technology development and transfer, a national pollution-prevention information clearinghouse, and award programs which can be incorporated in Part I of the Act. The Committee urges the federal government to reinforce public awareness programs on the merits of pollution prevention. The federal government also should learn more about integrated permitting at the plant level and extended producer responsibility – innovative approaches being experimented with in other countries for promoting pollution prevention.

CHAPTER 7: OCEAN DUMPING AND COASTAL ZONE MANAGEMENT

Ocean Dumping

Part VI of CEPA enables Canada to fulfil its international obligations under the London Convention, 1972, which restricts the dumping of waste and other substances into the ocean. This Part of CEPA should be made consistent with the other Parts of the Act. It should include an explicit reference to

CEPA's guiding principles — namely, the ecosystem approach, pollution prevention and the precautionary principle. Part VI should also be amended to implement these guiding principles. Ocean dumping should not be permitted unless the applicant provides proof that this is the best option from an environmental perspective. The scope of the definition of “ocean dumping” should be broadened, and CEPA should prohibit the dumping of any substance not on an exclusive list of authorized substances.

The Committee recommends that adherence to the polluter-pay principle should dictate the entire fee structure for ocean dumping permits; increased public participation in the issuance of these permits should also be encouraged. For the disposal of highly contaminated sediment, the use of effective and environmentally sound regional solutions should be facilitated. Monitoring and enforcement of the legislation should be strengthened to prevent illegal dumping. The Committee also requests that the impact of any potential transfer of Part VI of CEPA to the authority of the Department of Fisheries and Oceans be assessed before the Department of the Environment relinquishes any responsibilities in this area.

Coastal Zone Management

The ecosystems that make up Canada's extensive coastal zones are extremely productive and sustain great biodiversity, but they are showing increasingly significant signs of ecological imbalance. Canada must develop a program of coastal zone management, through a coordinated national strategy involving political, economic and legislative measures, in order to preserve the coastal environment and promote the sustainable development of coastal zones. The primary issues of concern in this area are administrative and legislative fragmentation, the lack of clearly stated goals, the limited scope of existing federal statutes, including CEPA, and the lack of a prevention and monitoring strategy for land-based sources of coastal and marine pollution. A national coastal zone management (CZM) policy should be drafted and the existing federal legislative framework, including Parts I and VI of CEPA, should be reviewed and amended to foster CZM.

Transboundary Water Pollution

Canada should have the authority to prevent and monitor transboundary water pollution that could violate certain obligations that it has with the United States and any other foreign country, along the same lines as its authority in the area of international air pollution. In view of the limited authority of the International Joint Commission, the Committee recommends that Part V of CEPA be amended to broaden the federal government's authority over transboundary water pollution.

CHAPTER 8: REGULATION OF NUTRIENTS, PRODUCTS OF BIOTECHNOLOGY, AND OTHER SUBSTANCES

Nutrients

Part III of CEPA prohibits the manufacture, use and sale of cleaning agents that contain a prescribed nutrient in a concentration greater than that permitted by regulation. To date, only the concentration of

phosphates in laundry detergent has been regulated. Aware of the growing concern over nutrient pollution of watercourses, the Committee recommends that the regulations be broadened to include other types of cleaning agents, and possibly to include nutrients other than phosphates. The Committee also recommends an evaluation of the need to broaden the powers of Part III to include monitoring of nutrient sources other than cleaning agents, such as industrial wastewater.

Products of Biotechnology

A new Part should be established under CEPA to deal specifically with products of biotechnology. This Part should include minimum notification and assessment standards for all products of biotechnology released into the environment, including those regulated under other federal statutes. Other federal Acts should prevail over CEPA in regard to products of biotechnology only if their notification, assessment and regulatory standards are equivalent to those prescribed under CEPA. A list of statutes considered equivalent to CEPA with respect to assessment processes for biotechnology products should be published.

Fuels and Motor Vehicle Emissions

Sections 46 and 47 of CEPA need to be amended to empower the Minister to make regulations in respect of fuels and fuel additives, quickly and efficiently. The Minister also should control the polluting properties of motor fuels both *before* and *after* combustion. Fuels exported from Canada should meet the same environmental and health standards as are applied in Canada.

Legislative authority over fuels, additives, and vehicle emissions should be consolidated under a single federal statute and administered by one department. Since these issues are essentially environmental in nature, legislative authority for vehicle emissions should be transferred from the *Motor Vehicle Safety Act* (Transport Canada) to CEPA.

Lead Shot and Lead Sinkers

Regulatory action under CEPA should be initiated to eliminate the import, sale, manufacture and all uses of lead shot in Canada by May 31, 1997. Regulatory action under CEPA should be initiated to prohibit the import, sale, manufacture and use of lead sinkers and jigs that are less than or equal to 2.5 centimetres by May 31, 1997.

Radioactive Substances

The nuclear sector in Canada falls under the *Atomic Energy Control Act* which is administered by the Atomic Energy Control Board. The Committee reviewed the 1994 Report of the Auditor General and received sufficient testimony on this issue to indicate that there is public concern about the effectiveness of Canada's regulatory regime for radioactive substances. Environment Canada should consider the desirability and feasibility of regulating these substances under CEPA in the same manner that chemical and other substances are now regulated.

Dioxins and Furans in Ambient Air

Polychlorinated dibenzodioxins and dibenzofurans (“dioxins” and “furans”) are highly persistent and bioaccumulative chlorinated chemicals, some of which are very toxic. Both chemicals are ubiquitous in the Canadian environment. There is a concern that the dioxin burden in human tissues is approaching the point where health may be affected.

The major sources of dioxins and furans in ambient air are incinerators and some industries. Most of the dioxins and furans deposited as air contaminants in Canada originate in the United States. A number of actions are appropriate in this area.

National Ambient Air Quality Objectives should be established for dioxins and furans, as has been done for a number of other air contaminants. Both dioxins and furans have been assessed in effluents from pulp and paper mills and have been designated “toxic” under CEPA. The Minister should promulgate regulations under CEPA to control air emissions of dioxins and furans from incinerators, and from other significant sources in Canada.

In light of the significant transboundary contribution to the dioxin and furan problem in Canada, the federal government should pursue negotiations with the Government of the United States under the terms of the Canada-U.S. *Air Quality Accord* to reduce U.S. emissions.

Contaminated Sites

Contaminated sites can cause serious environmental damage and can threaten ecosystem and human health. The fact that Canada has not yet resolved a clear legal liability regime for such sites is also creating mounting economic costs. The Committee believes that the federal government must take a number of initiatives to resolve this problem. First, it must clean its own house. To do so, it should develop an inventory containing comprehensive and consistent information on the number and characteristics of all federal contaminated sites. The government should then develop an action plan and schedule for the clean-up of all high-risk federal contaminated sites. Environment Canada should also lead the provinces and territories in completing a national inventory containing comprehensive and consistent information on the number and characteristics of all contaminated sites in Canada, and in developing a national legal liability regime for contaminated areas.

Mercury Contamination

Mercury contamination from the creation of reservoirs is an important environmental and public health issue. Because this type of contamination is not the type of human-generated contamination that is usually regulated under CEPA, this matter should be studied to determine whether it would be appropriate to regulate methylmercury under the Act.

CHAPTER 9: INTERNATIONAL COMMITMENTS

Part V of CEPA should be utilized to meet Canada’s international commitment to the Framework Convention on Climate Change. Part V should also add provisions authorizing the federal government

to comply with transboundary water pollution agreements. CEPA and its regulations on the export and import of hazardous waste should be amended to fulfil Canada's new commitments under the Basel Convention, and expanded to include non-hazardous waste to fulfil new commitments under the Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Waste. CEPA also has an important role to play in meeting the obligations of the Convention on Biological Diversity.

The Minister of the Environment is encouraged to continue taking an active part in relevant multilateral and bilateral organisations to ensure that the environmental agenda is upheld within bilateral and multilateral trade negotiations, and that international trade agreements respect Canada's right to develop and implement appropriate domestic environmental protection measures.

CHAPTER 10: ENVIRONMENTAL EMERGENCIES

The management of an environmental emergency (a major spill of hazardous substances, for example) involves prevention, preparedness, response and recovery. At present in Canada, there is an incomplete and ill-assorted set of legislative measures involving various levels of government, as well as voluntary initiatives. These measures do not provide adequate protection for human health and natural environments. CEPA's scope is extremely limited in the area of environmental emergencies, and there is no emphasis on prevention. CEPA should include enabling amendments for handling environmental emergencies. A federal safety net should be created in the Act, incorporating standards and codes for current and future practices. The federal government should initiate discussions with the provinces and territories to develop a national, single-window system for the registration of all sites containing hazardous substances in quantities exceeding prescribed thresholds, and a national spill-reporting network. All federal government entities should be subject to a comprehensive emergency management system. Finally, CEPA should authorize a civil cause of action to recover emergency management costs and damages for loss of access to, or enjoyment of, the environment as a result of spills.

CHAPTER 11: PUTTING THE FEDERAL HOUSE IN ORDER

The federal government has done very little to put its own house in order. Federal activities are not generally subject to provincial or territorial environmental laws. Although Part IV of CEPA was designed to address this issue, almost no action has occurred under CEPA and a significant regulatory gap remains. Unless effective regulatory action is taken under Part IV, the government's credibility will continue to be undermined and it will lack the moral leadership needed to promote pollution prevention in Canada. In the short term, provincial and territorial environmental measures should be adopted to fill existing regulatory gaps at the federal level. In the longer term, comprehensive regulations that would incorporate the highest environmental standards, and that would take precedence over other federal regulations in cases of conflict, should be developed under Part IV so the Government of Canada can play a leadership role. To accelerate the culture change needed for an effective "greening" of the Federal House, all federal departments and agencies should be required to develop detailed environmental management plans as part of the departmental "sustainable development strategies" that will be required under the revised Auditor General Act. These plans should reflect leading international standards. Each department should also appoint from within its

organization a senior management official charged with promoting the cause of the environment in all decision and policy making.

CHAPTER 12: ABORIGINAL PEOPLES AND ENVIRONMENTAL PROTECTION

Aboriginal peoples consider environmental protection to be an issue of great importance, but they told the Committee that CEPA has not worked for them. Many Aboriginal peoples wish to develop their own environmental protection regimes as part of self-government arrangements, while others want CEPA to be improved and made more responsive to their concerns. The Committee observed that very few Aboriginal organizations currently have the expertise to deal with all of their environmental issues.

Action should be focused on ensuring that self-government and land claim settlement agreements include provisions to establish environmental protection regimes where Aboriginal peoples seek to establish controls in this area. A framework should be established to discuss the process for amending CEPA as it relates to Aboriginal peoples. Consultation with Aboriginal peoples should be established with respect to the formulation of guidelines, codes of practice and objectives under CEPA, and financial and other support should be provided to Aboriginal peoples for capacity-building in the area of environmental protection.

CHAPTER 13: THE NORTH

Canada's North covers an immense area, is sparsely populated and environmentally sensitive. Being downwind and downstream from major industrial centres, the North is a global sink for pollutants, many of which accumulate in the tissues of animals that northerners, Aboriginal peoples in particular, use for food. In few places, therefore, is the link between pollution and human health as evident as it is in the North. Because many of the contaminants in the Northern environment come from other countries, Canada should continue to press for international action to reduce the emission of these contaminants at the source. The government should also continue to clean up the many abandoned waste sites throughout the North and ensure that developers take back what they bring into the region. Ocean dumping and land burial of non-hazardous wastes should only be allowed where no environmentally preferable alternatives exist.

Because existing scientific knowledge about the Arctic environment is not as well-developed as our understanding of southern ecosystems, the government should continue to fund northern science, in particular on the sources, pathways and effects of contaminants.

The federal government has a special responsibility for the North because it retains jurisdiction over both Yukon and the Northwest Territories. As aboriginal land claims are settled, and remaining responsibilities are transferred to both territorial governments, and the Northwest Territories itself is split to create the new territory of Nunavut, Environment Canada needs to define its responsibilities in the region.

CHAPTER 14: IMPROVED PUBLIC PARTICIPATION AND CITIZEN'S RIGHTS

Members of the public must be encouraged to play a more active role in protecting the Canadian environment. People must therefore be provided with improved information tools and enhanced rights and remedies.

An electronic public registry should be established to provide systematic information on all proposed and final decisions under CEPA (e.g., waivers, approvals, guidelines, regulations, agreements, etc.), and a 60-day notice and comment period should be provided with respect to all proposed and final decisions, except in emergency situations. A right of review should also be granted in relation to all decisions that allow a pollutant to be used or polluting activities to be carried out. Further, the National Pollutant Release Inventory (NPRI) should be expressly mandated under CEPA. In order to require reporting on pollution-prevention actions such as pollution-prevention plans and source reduction initiatives, the scope of the NPRI should be broadened. Rather than focus only on the quantities of toxic substances released into the environment, the NPRI should also require information on substances generated and used. The confidentiality provisions regarding proprietary information must be materially narrowed and penalties imposed for frivolous claims. The current whistleblower protection should be strengthened and extended to all violations under the Act.

Requests for an investigation under section 108 should be facilitated by providing members of the public with practical assistance in making the application and by providing them with a final account of all action taken. The remedies available to members of the public should be broadened to allow citizen suits and private prosecutions with enhanced rights for the citizen prosecutor. Consideration should also be given to providing for a civil action based on increased environmental risk.

An environmental fund supported by monies collected from fines, fees and other charges imposed under the Act should be established to help defray the costs of administering CEPA. A participant funding program, financed from the environmental fund, should be expressly set up under the Act to enable individuals and groups to participate more fully in CEPA's decision-making process.

The foregoing measures should be enacted in the short term. In the long term, a comprehensive federal environmental bill of rights should be developed for the benefit of all Canadians and Canadian workers.

CHAPTER 15: ENFORCEMENT

The enforcement of CEPA has been unsatisfactory for a variety of reasons, notably because the official Enforcement and Compliance Policy is not being applied consistently in practice. The regionalization of enforcement decisions and a confused chain of command have resulted in inconsistent decisions between regions. There are insufficient enforcement tools. Major changes are needed.

A separate enforcement office with regional branches should be established to ensure that decisions are made independently of middle management. The Enforcement and Compliance Policy should be revised and updated and processes put in place to ensure that the Policy is applied in practice. Performance objectives should be set and methods developed to evaluate effectiveness. Detailed information on enforcement action should be provided to the public.

The range of enforcement options should be expanded. A system of administrative monetary penalties, with negotiated settlements as an alternative to the payment of the fine, should be established under CEPA. The existing ticketing provisions under section 134 should be proclaimed in force on a priority basis.

The powers of inspectors should also be strengthened. Greater recourse to warrants and tele-warrants should be allowed for inspection purposes. The use of cease and desist orders should be expressly permitted, and the current emergency powers should be extended to all parts of the Act. Official analysts should be granted selected inspection powers, and an additional category of enforcement personnel should be created that would have the powers of a peace officer.

Improved guidance should be provided to the courts by enacting sentencing guidelines and classifying the offences. All fines collected should be placed, in whole or in part, in an environmental fund (as noted above) that should be established to help finance some of the activities carried out under the Act. Enforcement action should also be actively publicized.

CHAPTER 16: THE ADMINISTRATION OF CEPA

Under CEPA, there are three principal mechanisms for harmonizing federal-provincial environmental activities: the Federal-Provincial Advisory Committee (FPAC), equivalency agreements, and administrative agreements.

The Committee believes that FPAC has been a useful forum for federal-provincial consultation in relation to CEPA-related issues, but we have concerns that it might be supplanted in its federal-provincial coordination role by the Canadian Council of Ministers of the Environment. FPAC should continue as the main federal-provincial-territorial consultative mechanism for CEPA-related issues.

The Committee has a number of concerns about the process to achieve administrative and equivalency agreements, especially the absence of opportunities for public input into the agreement-making process, the lack of public information about the agreements, and the need to ensure continued federal accountability. To address these concerns, the Committee recommends the publication of proposed and final texts of these agreements, public consultation, detailed annual reporting on the administration and enforcement of CEPA regulations, and periodic review of the agreements. The Committee also recommends that these agreements not take effect until endorsed by a resolution of the House of Commons. Similar recommendations are made with respect to administrative agreements under section 36 of the *Fisheries Act*.

CHAPTER 17: CONCLUSION

Good health and a clean environment are two essential preconditions to our well-being. Although Canada is one of the world's richest and healthiest nations, we are squandering our unique environmental heritage and putting our own health at risk in the process. The Committee believes that fundamental change to rectify this trend must be based on an approach that is long-term in its vision, preserves ecosystem integrity, prevents pollution, is guided by the precautionary principle, and entrusts all Canadians with a sense of environmental responsibility.

This vision is anchored in the observation that economic prosperity, environmental health and social well-being are closely inter-related. Comprehensive reforms are required to achieve these goals. Economic incentives must be structured to account for environmental and social impacts. Technology

development must focus on conservation of energy and resources to achieve economic and social objectives. Renewable resources must be managed on a sustainable basis.

Achieving this long-term vision will also require important changes to CEPA. As described throughout our Report, these changes include: strengthened federal stewardship measures to provide leadership by example; more aggressive control of toxic substances, in which action can be taken in some cases on the basis of a hazard assessment as opposed to a full risk assessment; stringent and consistent enforcement; increased use of flexible and efficient control measures to create incentives for continuous improvements in pollution-prevention efforts; the promotion of social support for pollution prevention through public information and technology transfer initiatives, and through increased opportunities for public involvement in policy development processes, and in monitoring and holding government and regulated parties accountable for pollution prevention obligations. Finally these changes must be supported by adequate funding.

The Committee has presented these recommendations to reflect the powerful views expressed to us during our public hearings over the past year. It is clear that an increasing number of Canadians recognize that environment and wealth are mutually sustaining and that healthy ecosystems bring not only better health and quality of life, but also a better and more sustained material well-being. We believe that a reformed CEPA can make an essential contribution to this vision for Canada's future.

THE FEDERAL ROLE IN ENVIRONMENTAL PROTECTION

INTRODUCTION

When the *Canadian Environmental Protection Act (CEPA)* was proclaimed in 1988, it articulated a vision of the role of the federal government in environmental protection. That role was based on the premise of federal leadership in setting standards, in firm and consistent enforcement, and in applying model environmental standards to federal operations. Since 1988, much has happened: a new government has been elected, court rulings have helped to define federal jurisdiction in environmental protection, the importance of international environmental issues has increased, and a period of budget austerity has reduced the resources available to Environment Canada.

All these changes raise anew the question of the federal role in environmental protection. Because this issue is fundamental to its consideration of how CEPA should be amended, the Committee addresses it explicitly at the beginning of this Report.

An environmental protection regime encompasses a wide range of related activities including scientific research, standard-setting, pollution prevention initiatives, environmental assessment requirements, compliance and monitoring, environmental reporting, communications and education, international liaison and negotiations, emergency response, and stewardship. In determining the nature of the federal role in environmental protection, it is necessary to delve into these discrete activities, since the appropriate federal action will vary depending on the activity. Before doing so, however, a number of general considerations raised by the many witnesses who commented on the federal role should be reviewed.

Witnesses presented a wide range of considerations relevant to the federal role in environmental protection. The Committee grouped these under the following headings:

- public opinion
- the constitutional division of powers
- incorporating an ecosystem perspective
- the growing importance of international issues
- overlap and duplication
- economies of scale

- resources
- commitments made in *Creating Opportunity* the Liberal election platform.

Public Opinion

Virtually every witness who spoke on the topic argued that the federal government should play a leadership role in environmental protection. Environmental witnesses, such as the Canadian Environmental Law Association, the Environmental Coalition of PEI, the Environmental Resource Centre, the Aquatic Ecosystem Health and Management Society, the Canadian Institute for Environmental Law and Policy, the West Coast Environmental Law Association, the Saskatchewan Environmental Society, and the Clean Nova Scotia Foundation all advocated the establishment of national standards. Aboriginal witnesses, including the Mohawk Council of Akwesasne, the Grand Council of Crees (of Quebec), the Horse Lake Band, the Tungavik Federation of Nunavut and the Chiefs of Ontario, urged the federal government to respect its fiduciary obligations to native people and lands. Labour groups such as the Canadian Labour Congress and the Ontario Federation of Labour argued for the need to ensure workers healthy and safe workplaces. In addition, a number of diverse organizations, including the Environmental Law Section of the Canadian Bar Association, the Canadian Institute of Chartered Accountants, and the Federation of Canadian Municipalities, pressed for nationally consistent standards.

Although not all industry and business witnesses agreed with the need for federal regulations, most called for federal leadership in ensuring harmonized national standards that can be administered on a “one window” basis with a minimum of inter-jurisdictional overlap or variance in standards or duplication in reporting and other compliance requirements.

Virtually every witness who spoke on the topic argued that the federal government should play a leadership role in environmental protection.

The call for strong federal leadership is not new. In March 1992, the Standing Committee on Environment noted in its report, *Environment and the Constitution*, that “Almost without exception, and whatever their backgrounds and perspectives, the witnesses before the Committee asserted the need for continued federal leadership on

environment and sustainable development.”¹ This emphasis is echoed in polling data, which indicate that Canadians expect the federal government to play a leadership role in maintaining environmental quality.²

Constitutional Division of Powers

A number of witnesses, including the Environmental Law Section of the Canadian Bar Association, and the Canadian Institute for Environmental Law and Policy (CIELAP), urged the federal government to comply with its constitutional jurisdiction over environmental issues. The Committee agrees that the constitution provides a legal basis for federal leadership with respect to key aspects of environmental management.

The Constitution does not assign explicit jurisdiction over the environment as a specific subject matter to either the federal or the provincial governments. The extent of their respective jurisdiction must therefore be inferred from the division of issues explicitly addressed in the Constitution. The provinces' authority to enact environmental protection laws is based primarily on their jurisdiction over property and transactions between individuals and on their ownership and management of natural resources within their borders.

Federal authority rests on a number of grounds, including its responsibility for federal lands and facilities, and its authority to enact environmental measures related to the subjects specifically allocated to the federal government in sections 91 and 92.10 of the *Constitution Act, 1987*. These include, for example, trade and commerce; sea coasts and inland fisheries; navigation and shipping; Indians and lands reserved for Indians; census and statistics; and interprovincial and international transportation.

Aside from the specific powers listed above, most authorities agree that the federal jurisdiction over the environmental protection issues addressed in CEPA is based primarily on a combination of the federal criminal law and “peace order and good government” (POGG) powers. Together these powers provide the federal government with the jurisdiction to address environmental matters that go beyond local or provincial concern or capability and which are therefore matters of “national concern”. As CEPA's preamble indicates, in 1988 the federal government premised its right to control toxic substances on the assertion that the presence of toxic substances in the environment constitutes a matter of “national concern”.

Since CEPA was promulgated, the Supreme Court of Canada has reaffirmed the legal basis for a federal environmental protection role under the POGG “national

¹ House of Commons, Standing Committee on Environment, *Environment and the Constitution*, March 1992, p. 25.

² Synergistics, *Canadians and the Environment: Key Trends and Implications for Federal Decision Makers*, 1993.

concern” doctrine in *R. v. Crown Zellerbach Canada Ltd.*³ In addition, in *Friends of the Old Man Society v. Canada*,⁴ the Supreme Court confirmed the right of the federal government to enact environmental measures as an adjunct to its specifically enumerated powers, including the fisheries and POGG powers. In those same cases, however, the Court indicated that environmental protection is such a broad area of concern that the federal government will not be permitted a plenary jurisdiction over environmental issues simply on the grounds that there is some element of national concern. Moreover, a recent decision of the Quebec Court of Appeal struck down as unconstitutional the application of a CEPA PCB interim order to an industrial spill.⁵ The Court of Appeal ruled that the interim order was primarily focused on protecting the environment, and not on protecting human life and health. The court concluded that no issue of “national concern” arose to justify the application of the federal order. The Department of Justice has appealed this decision.

The Committee believes that the growing importance of transboundary environmental issues and the increasing internationalization of trade and environmental issues suggest that the constitutional basis for a strong federal role is, if anything, even greater today than it was when CEPA was first introduced. Indeed, the Environmental Law Section of the Canadian Bar Association and the Canadian Institute of Resources Law (CIRL) both argued that the growing importance of international trade will increase the need for the federal government to rely on its “trade and commerce” power to promulgate and enforce minimum national environmental standards. As CIRL observed, “if one can point to the power that is most likely to prove most effective in providing the federal government with a lever to take on and implement international commitments related to sustainable development over the next decade, we believe that lever lies in the power over international trade and commerce”.⁶

As can be seen from this brief overview, the constitutional division of powers provides considerable latitude in defining the federal government’s role in environmental protection. In particular, the constitution justifies federal activity with respect to three issues: control over the “Federal House”, issues of federal jurisdiction specifically enumerated in sections 91 and 92.10, and issues of “national concern”, such as toxic substances. In addition, the Committee believes that the federal authority over international trade and commerce will serve as the basis for enhanced federal environmental action in the future.

Incorporating an Ecosystem Perspective

Environmental problems exist at different levels and scales, from the local to the global. It has long been understood that action to avoid or solve these problems is most

³ [1988] 1 I.S.C.R. 401.

⁴ [1992] 2 W.W.R. 193.

⁵ *Le Procureur général du Canada c. Hydro-Québec*, February 14, 1995.

⁶ Canadian Institute of Resources Law, *CEPA and Sustainable Development: The Constitutional and Federalism Context*, Brief to the Committee, November 29, 1994, p. 3.

effective when there is comparability of scale. As numerous witnesses observed, it has been a longstanding principle of environmental policy that provincial, territorial or municipal governments are responsible for local concerns, while the federal government is responsible for environmental issues that are national or international in scope. This is consistent with the "national concern" doctrine on which CEPA was based in 1988, and is the model followed by many other federal states.⁷

This division of responsibilities allows provincial, territorial and municipal governments to account for differences in ecosystems, economic structure and social values in determining how to address environmental problems of a local nature. For example, the provinces and territories all handle the issues of solid waste management, bottle recycling, wildlife management, and forestry practices differently. Where risks to human health or ecosystems cut across administrative borders, however, these risks are more properly seen as national in scope and lend themselves to federal leadership.

...it has been a longstanding principle of environmental policy that provincial, territorial or municipal governments are responsible for local concerns, while the federal government is responsible for environmental issues that are national or international in scope.

The Committee agrees with the many witnesses who asserted that one such risk is the threat posed by toxic substances to human and ecosystem health. Because many of these substances can travel long distances through air or water, can cross environmental media, are sometimes used widely, and in some cases originate from non-point sources, it is often difficult to control them at the local level. In other words, the threat they pose is broad and pervasive. As the Inuit Tapirisat and other aboriginal representatives testified, this is especially true in the Canadian Arctic, where industrial and agricultural pollutants originating from southern Canada and other countries have been found in the fatty tissues of some of the animals northerners eat.⁸

The Growing Importance of International Issues

Most witnesses agreed that environmental policy must account for the increasing globalization of environmental and economic issues. Four globalization trends in particular are significant for the federal role. First, science is demonstrating that local environmental problems are often part of much larger regional and sometimes global

⁷ The Innovest Group International, "New Directions in Environmental Policy: A Ten-Country Review of International Trends and Best Practices," A discussion paper prepared for the Policy and Strategic Planning Branch of Environment Canada, 1993.

⁸ Inuit Tapirisat of Canada, *Reconsidering the Canadian Environmental Protection Act*, Brief to the Committee, May 3, 1995, p. 3.

trends. The loss of biodiversity, climate change, stratospheric ozone depletion and the long-range movement of atmospheric pollutants are perhaps the best-known examples of environmental problems with both local and broader manifestations.

Most witnesses agreed that environmental policy must account for the increasing globalization of environmental and economic issues.

Second, and in large part as a result of the first trend, Canada is party to a growing list of international environmental conventions and treaties that impose performance obligations on their signatories. Examples include the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal*, the *Montreal Protocol on Substances that Deplete the Ozone Layer* and the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972* (London Convention, 1972), all of which are being implemented domestically at least in part through CEPA. As both CIRL and the International Institute for Sustainable Development (IISD) observed, these conventions and protocols are gradually building a body of international environmental law that is exerting a growing influence on domestic policy and that, in turn, is creating increased pressure for federal action to assert and enforce minimum national environmental standards to comply with the conventions.

Third, the rise of “free trade” as the dominant global economic strategy is leading to a rapid convergence in the economic policies and practices of industrialized countries, including regulatory approaches. This development also has important implications for the federal role. Canada has a vital interest in the negotiation of widely applicable international standards through institutions such as the International Standards Organisation and the World Trade Organisation to ensure that trade dynamics and agreements do not lead to a diminution of environmental standards or to a reduction in Canada’s ability either to protect its own environment, or to contribute to global environmental protection.

Finally, over the last 20 years there has been an increase in the number of multilateral and bilateral institutions addressing environmental issues that affect Canada. The Committee strongly believes that Canada should continue to be involved in the work of these institutions—including the International Joint Commission, the Organisation for Economic Cooperation and Development, the United Nations Commission for Sustainable Development, the United Nations Environmental Programme, and the North American Commission on Environmental Cooperation—in order to influence their agenda and protect Canadian interests.

In the view of the Committee, each of these trends has implications for the federal role. These were well summarized by Steven Kennett of CIRL,⁹ who observed that the internationalization of economic and environmental issues has several implications for the federal role in environmental protection.

- Negotiating and assuring compliance with international environmental or economic agreements may create pressure for federal intervention in areas traditionally within provincial responsibility (e.g., climate change strategies).
- Environmental considerations in international trade agreements may create pressures for harmonization at the international level which may affect the possible scope of domestic regulation and which may reduce the scope for divergent provincial policies.
- The increasingly international scope of environmental problems (global climate change, biodiversity, ozone depletion) is enhancing the need for coordinated international action as individual countries can no longer resolve all their environmental problems. The need for such international coordination requires an enhanced federal role.

Overlap and Duplication

Representatives of industry and provincial governments repeatedly expressed their concerns to the Committee about the confusion and added costs they claim result from federal-provincial overlap and duplication in environmental protection activities. This overlap can take different forms, such as similar regulations or uncoordinated inspections. These views were expressed succinctly by the Mining Association of Canada, whose representative stated that “duplication, overlap and jurisdictional conflict between governments and among agencies harms industry competitiveness”.¹⁰

Because of these concerns, many industry witnesses strongly endorsed the current initiative of the Canadian Council of Ministers of the Environment (CCME) to try to minimize overlap and duplication. Some witnesses argued that any review of CEPA should be premised on the results of this initiative. Some witnesses went further, and argued that, in order to avoid overlap and duplication, the federal government should minimize the number of new standards it establishes. Others echoed the warning expressed by a lawyer from the Montreal law firm Martineau Walker that “federal government intervention in areas that are already legislated will multiply and increase the opportunities for conflict”. (49:17)

⁹ Steven Kennett, “Making Federalism Work for Sustainability: Addressing Overlap, Duplication and Conflict in Environmental Regulation,” Discussion Paper for the Projet de Société workshop on Environmental Jurisdiction, Banff, October 1993.

¹⁰ Mining Association of Canada, Brief to the Committee, September 28, 1994, p. 8.

Many other witnesses were critical of the CCME initiative, however. They expressed concern that the initiative is proceeding too rapidly and without an exposition of the problem posed by overlap and duplication; that the federal government is participating without having clearly defined its role in environmental management; and that, as a result, the process might result in a diminution of environmental protection standards across Canada.

The Committee agrees that redundant and inefficient environmental protection laws in Canada should be eliminated and avoided where possible. In evaluating these concerns, however, the Committee has taken note of CIELAP's observations that, while federal and provincial environmental protection activities undoubtedly overlap, the actual extent of duplication has not been documented rigorously and what evidence exists is often anecdotal in nature. A 1993 review of Environment Canada's regulatory programmes, for example, concluded that there are areas of overlap and duplication with provincial requirements in only five of CEPA's 25 regulations dealing with toxic air emissions, PCB storage and pulp and paper mill effluents.¹¹

The Committee also notes that various reviews of this issue¹² have concluded that:

- A certain degree of overlap is unavoidable because the environment is not a single matter that can be assigned exclusively to one or another level of government.
- There is no consensus regarding the seriousness of problems arising from jurisdictional overlap in Canadian environmental regulation.
- The conclusion reached regarding the consequences of overlapping jurisdiction may depend on whether the primary focus is on the interests of the regulated industries, on the operation of intergovernmental relations and the allocation of government resources, or on the protection of human health and the environment.

While the Committee agrees with the widely expressed desire to minimize redundant regulatory provisions and to eliminate unnecessarily duplicative administrative requirements across Canada, it also wishes to ensure that this desire does not lead to an erosion of standards or to a reduction in the federal government's ability to address a new issue or to assert leadership. In discussing the challenges in introducing the precautionary principle into Canadian environmental policy, for example, Professor

¹¹ Environment Canada (1994) Regulatory Review, cited in Environment Canada, *Report on the Canadian Environmental Protection Act, April 1993 to March 1994*, p. 20.

¹² For example, Kennett, *op. cit.*, note 9; and J. Owen Saunders, "Good Federalism, Bad Federalism: Managing Our Natural Resources," in Saunders, ed., *Managing Natural Resources in a Federal State, Essays from the 2d Banff Conference on Natural Resources Law*, Carswell: Toronto, 1986, pp. ix.

VanderZwaag of Dalhousie University observed that Canada is grappling with the same puzzle as other federal countries: “how do you get precaution into federal legislation [while] making sure it harmonizes with state and territory legislation?” (55:52)

In addressing this issue the Committee has also been mindful that some overlap may be desirable. As J. Owen Saunders, the Executive Director of CIRL wrote:

the purpose of federalism is not the elimination of conflict . . . the very nature of federalism presupposes that a diversity of political responses to a given issue is a good thing.¹³

Canadian governments can resolve overlap in one of two ways: they can try to define exclusive areas of jurisdiction or they can coordinate their efforts to prevent duplication. Given the encompassing nature of many environmental issues, the Committee believes that coordination is likely to prove the more fruitful strategy. The Committee also recognizes that the way the federal government discharges its role may vary by province, as it does now, to reflect differences in provincial capacities.

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Economies of Scale

The federal role should also be informed by the fact that certain environmental protection activities are best carried out at the national level because of their high costs and wide applicability. The assessment under CEPA of the risks posed by new chemical substances is a good example of such an activity. Support for environmental science is another example. As a number of witnesses observed, the federal government has established a valuable infrastructure which supports most environmental science research in Canada. The Committee believes that the federal government has an important responsibility to maintain this critical mass of scientific research.

¹³ Saunders *op. cit.*, p. xi.

As a number of witnesses observed, the federal government has established a valuable infrastructure which supports most environmental science research in Canada. The Committee believes that the federal government has an important responsibility to maintain this critical mass of scientific research.

Resources

The recent budgetary cuts must also be considered when defining the federal role. The budget of Health Canada is to decline by only 4 percent over the next three years. In the case of Environment Canada and Natural Resources Canada, however, the cuts are substantial: approximately 32 percent and 50 percent, respectively, over three years. The cuts made to Environment Canada's programs related to the control of toxic substances under CEPA are smaller, but substantial nevertheless — about 20 percent over three years. Enforcement activities are to be maintained at current levels but focused more clearly on the Federal House responsibilities. Between 1988 and 1998, Environment Canada expects that its expenditure on environmental protection strategies and responses will approximately triple as a percentage of the department's program budget.

The Committee notes that some provinces have also recently cut the budgets of their environment ministries. For example, Alberta reduced its environment budget by 30 percent in 1994, while Ontario cut its by 10 percent. Thus, the federal government cannot simply devolve its responsibilities to the provinces and expect the same level of environmental protection to be maintained.

Fundamentally, the Committee does not believe that budgetary cuts constitute an acceptable excuse to reduce the role of the federal government. Indeed, the Committee believes that the allocation of responsibilities for environmental protection should be made first on the basis of legal and policy considerations and not be driven by whatever resources happen to be available at the time. In discharging its role, however, the federal government obviously must take available resource levels into account. The drop in funding for Environment Canada will force the department to focus its efforts more narrowly and to find innovative ways to deliver its programs in partnership with the provinces and the private sector. Many of the chapters following in this Report describe the basis for this new approach to asserting national leadership in environmental protection.

Commitments Made in Creating Opportunity

During the last election campaign the Liberal Party stated in its campaign platform, *Creating Opportunity*, that

- A Liberal government will lead in protecting Canada's environment.¹⁴

The Committee believes that, having made such a pre-election commitment, the government now has an obligation to Canadians to act on its promise.

Collectively, all these considerations provide the context for a reaffirmation and redefinition of the federal role in environmental protection. The constitution provides the federal government with the necessary authority to establish a range of national standards and, in particular, to control toxic substances. The scale of the environmental and health risks posed by these substances, the growing influence of international factors on Canadian environmental policy, the economies of scale to be achieved by centralizing certain environmental protection activities, and the political commitments made in *Creating Opportunity* all argue for a continued strong federal role in environmental protection. Budgetary and resource cut-backs, and concerns about duplication, however, demonstrate that Environment Canada must make important changes to the way it does business. The *status quo*, in other words, is not an option.

ELEMENTS OF THE FEDERAL ROLE

The Committee believes that the role of the federal government includes promotion of sustainable development through the integration of economic, social and environmental considerations in all federal policies; exemplary federal stewardship; support for scientific research; provision of information and promotion of the development and use of "best practices"; and establishment and implementation of national environmental standards.

Promotion of Sustainable Development

The promotion of sustainable development will require all levels of government and all private-sector decision-makers to integrate environmental matters in the development of economic and social policies and decisions. Dr. Art Hanson of the International Institute for Sustainable Development (IISD) observed that the federal government cannot effect this fundamental change simply through amendments to CEPA, and that it will require systematic change across all legislation and within all departments. In recognition of this obligation, the federal government is appointing a Commissioner of the Environment and Sustainable Development to audit its performance in this regard. The forthcoming amendments to the *Auditor General Act* (Bill C-83) will require each federal department to prepare sustainable development strategies indicating how the department will systematically integrate environmental considerations into its decision-making. The principle of sustainable development is discussed further in Chapter 3.

¹⁴ Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, Ottawa: p. 66.

Federal Stewardship

The Committee strongly supports the many witnesses who argued that the federal government should apply exemplary pollution prevention and environmental assessment principles and practices to federal agencies, Crown corporations and other facilities, and initiatives supported by the federal government. In the words of the Canadian Environmental Industry Association, the federal government should “ensure that all its operations and facilities meet, if not exceed, the strictest environmental standards in Canada”.¹⁵

In the words of the Canadian Environmental Industry Association, the federal government should “ensure that all its operations and facilities meet, if not exceed, the strictest environmental standards in Canada”.

There are two main federal statutes that involve stewardship initiatives. The *Canadian Environmental Assessment Act* requires environmental assessments for all projects that are proposed or funded by the federal government, authorized by a federal license or permit, or will take place on federal lands. And, although it has not been used extensively, Part IV of CEPA provides the legislative authority to develop pollution prevention standards for federal activities, facilities and lands. As discussed further in Chapter 11, the Committee believes that a number of changes are required to ensure that Part IV provides an adequate basis for ensuring exemplary federal stewardship. Fundamentally, however, the Committee recognizes that the issue of federal stewardship is a question of political will.

Scientific Research

As Professor Schindler of the University of Alberta eloquently reminded the Committee, science is the essential, if often overlooked, foundation of an environmental protection strategy. Canada’s investment in environmental sciences, for example, was instrumental in convincing the United States to reduce its emissions of the chemicals causing acid rain. As the Committee learned, Canada now needs to make similar investments in other areas (such as the long range transport of airborne chemical substances being deposited in the Great Lakes and in Canada’s Arctic) in order to be able to negotiate effective international controls.

¹⁵ Canadian Environmental Industry Association, Brief to the Committee, October 1994, p. 23.

...science is the essential, if often overlooked, foundation of an environmental protection strategy.

The federal government has developed a first class infrastructure of research institutes and currently accounts for about 75 percent to 80 percent of all expenditure in environmental sciences in Canada. The provinces have come to rely on the federal scientific effort, much of which involves basic research on issues related to toxic chemicals, stratospheric ozone depletion, climate change and acid rain. Even among the major detractors from a strong federal role, the Committee observed support for the continuation of this aspect of the federal responsibility. The Committee also reminds the Government that, in *Creating Opportunity*, the Liberal Party stated that it would “commit 25 percent of all new government funding for research and development to technologies that substantially reduce the harmful effects of industrial activities on the environment, or that specifically enhance the environment”.¹⁶

The Committee strongly believes that, because the results of the federal government's environmental science programs are broadly applicable across the country, the federal government should continue to act as the main source of scientific information on the Canadian environment and of improved scientific techniques, such as ecosystem science, risk assessment methodologies and environmental effects monitoring.

Information and “Best Practices”

In addition to supporting new scientific developments, the federal government should also provide information to the public and promote the adoption of policy and management “best practices”. Elsewhere in this Report, for example, we recommend the following initiatives:

- Developing and emphasizing the use of model pollution prevention strategies when addressing issues within the federal jurisdiction.
- Partnering with other jurisdictions and the private sector in designing pollution prevention methods, full cost accounting techniques, environmental management system protocols, and other innovative techniques.
- Facilitating public education and participation.
- Promoting the application of ecosystem approaches to managing environment-economy integration.

¹⁶ Liberal Party of Canada, *Creating Opportunity, The Liberal for Canada*, pp. 67-68.

- Developing and using economic instruments to prevent pollution.
- Maintaining the State of the Environment Report, a key tool for monitoring and evaluating progress towards sustainable development.

As an innovative statute when it was proclaimed in 1988, CEPA influenced the design of several provincial environmental protection practices. The Committee agrees with the Canadian Labour Congress and other witnesses who argued that a reformed CEPA should continue to exert such influence.

Leadership in Interprovincial and International Issues

Most witnesses also agreed that the federal government should play an important leadership role in helping resolve issues requiring inter-jurisdictional cooperation. As the Canadian Institute of Resources Law (CIRL) observed, “a key component of promoting sustainable development at the federal level is . . . coordination with provincial legislation and policy”.¹⁷ Federal leadership is particularly required in responding to the growing demand to harmonize standards and to avoid duplication and overlap. The federal government should ensure, for example, that the CCME harmonization initiatives respect the need for a strong federal role and protect against any diminution of standards or quality of environmental protection in the name of harmonized standards.

The Committee also believes that federal leadership is required in additional cases including, for example, issues which must be addressed by more than one province, even though the risk posed in each case is local in nature (e.g., underground storage tanks).

“...a key component of promoting sustainable development at the federal level is . . . coordination with provincial legislation and policy”.

Similarly, for the reasons described above, the Committee believes that the federal government must continue to take a lead role in participating in international institutions, in negotiating international agreements and protocols, and in ensuring national compliance with such agreements. The Committee believes that there is particular need for federal leadership, for example, to address nationally significant ecosystems, such as the Great Lakes, the St. Lawrence, the Fraser River Basin, and the

¹⁷ CIRL, *op. cit.*, p. 4.

Arctic, each of which is subject to significant environmental stresses from international sources.

National Standards

In contrast to the general agreement on the issues discussed above, the Committee heard widely divergent views about the extent to which the federal government should establish national environmental standards that, directly or indirectly, control or restrict the actions of all Canadians. This issue raises three main questions:

- Should there be national environmental standards?
- If so, what should these standards cover?
- Who should develop them?

Should there be National Environmental Standards?

Many witnesses urged the federal government to set strong, independent national standards. By contrast, many of the industry witnesses agreed with the Canadian Pulp and Paper Association, which advocated the need for harmonized standards across the country, but argued that the federal government should only develop its own standards where federal action could generate both an economic and an environmental benefit.¹⁸

The Committee strongly believes that national environmental standards are imperative for a variety of reasons. Only national standards can ensure the right of all Canadians to the same minimum levels of health and environmental protection. The Federation of Canadian Municipalities argued, for example, that federal standards can minimize the possibility of provincial competition for industry location based on lower discharge standards(68:7). As CELA and CIELAP recently observed, “pollution havens, which are intended to attract investment, can prompt a race to the bottom’ among competing jurisdictions”.¹⁹ Moreover, even if they all had the requisite political will, some provinces simply do not have the capacity to develop comprehensive environmental protection standards.

...national environmental standards are imperative for a variety of reasons. Only national standards can ensure the right of all Canadians to the same minimum levels of health and environmental protection.

¹⁸ Canadian Pulp and Paper Association, Brief to the Committee, December 1994, p. 1.

¹⁹ S. Kauffman, P. Muldoon and M. Winfield, *The Draft Environmental Management Framework Agreement and Schedules: A Commentary and Analysis*, Canadian Institute for Environmental Law and Policy and Canadian Environmental Law Association, Toronto: March, 1995, p. 13.

The Committee also believes that national standards are essential to establish a level playing field for domestic and foreign enterprises seeking to do business in more than one province. As the witness from KPMG Environmental Services stated, "I know that the organizations I work with get frustrated, particularly where they are national organizations operating across the country, where they have to deal with different specific requirements on the same issue in different provinces. I think that is a real disincentive to business and a costly issue for government and business." (76:19)

What Should National Standards Cover?

Most witnesses agreed that the federal government's obligation to protect the environment may require the promulgation of federal standards covering the environmental protection of federal lands and facilities. As noted above, Part IV of CEPA currently authorizes such standards and should therefore be retained and strengthened. (See Chapter 11 for a more detailed discussion of federal stewardship.)

In addition, most witnesses agreed that the federal government has the right and obligation to develop environmental protection standards in relation to the issues explicitly allocated to federal jurisdiction by the *Constitution Act, 1867*. As noted above, these include trade and commerce, sea coasts and inland fisheries, navigation and shipping, Indians and lands reserved for Indians, census and statistics, and interprovincial transportation. Some of these issues are covered by provisions in CEPA covering state of environment reporting (Part I), export and import of hazardous wastes (sections 41 to 45 of Part II), international air pollution (Part V), and ocean dumping (Part VI). These provisions should also be retained and, where appropriate, strengthened. (See Chapters 5, 6, 7, 8 and 9.)

The most contentious issue with respect to the scope of the federal government's role in setting standards concerns the degree to which the federal government should establish standards covering issues of "national concern". Witnesses expressed a range of views. Conveying the opinion of all of the environmental witnesses on this issue, CIELAP stated that "the federal government must take a more assertive approach to the exercise of its jurisdiction in the environmental field in order to provide national leadership and . . . [should] set minimum quality standards for all Canadians".²⁰ For its part, the Canadian Electrical Association argued that CEPA should remain focused on controlling toxic substances while providing a framework for setting priorities and addressing pollutants and wastes more effectively.²¹ Finally, the Canadian Chemical

²⁰ Canadian Institute for Environmental Law and Policy, *Reforming the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, p. 2.

²¹ Canadian Electrical Association, *Review of the Canadian Environmental Protection Act*, Brief to the Committee, December 1994, p. 2.

Producers' Association argued that regulations should only be developed under CEPA when voluntary measures have proved ineffective.²²

The Committee strongly believes that the federal government must retain and act on the responsibility for environmental issues such as toxic substances. For all the reasons outlined above, the Committee believes that these issues are matters of national concern that cannot be delegated. Only federal action will ensure that the Canadian environment is uniformly protected from these risks. Only federal action will ensure that the health of all Canadians is protected from these risks. And only federal action will protect future generations of Canadians, regardless of their province of origin.

Since environmental issues continue to emerge and evolve, it is impossible to predict all issues that will be covered by the national concern doctrine. Nonetheless, the Committee believes that, at a minimum, it includes products of biotechnology, chemical substances new to Canada, the approval of pesticides for use in Canada, substances and actions that pose a transboundary threat to the environment, and substances and actions that pose a risk to human health.

In the Committee's opinion, the federal government has both an important obligation and clear jurisdiction to regulate toxic substances, since these substances can travel long distances, cross media, threaten human health or biodiversity and are often used widely.

The Committee further believes that there should also be national standards for a number of issues that are matters of shared jurisdiction, but which for reasons of economic efficiency should be addressed in a nationally consistent, "harmonized" manner. As noted in the discussion of issues requiring national leadership above, these include:

- Substances or activities which pose a local risk but which are common to most provinces.
- Cases where an effective national resolution of the issue might have international trade implications for Canadian industry.
- Cases where the issue is the subject of an international agreement.

Who Should be Responsible for Developing National Standards?

A few witnesses proposed that all national standards should be developed on the basis of federal-provincial consensus. The Committee rejects this position for three reasons. First, as Brian Pannell, the Executive Director of Pollution Probe, observed, an arrangement predicated on federal-provincial consensus could result in the adoption of "lowest common denominator" standards. Second, a cooperative standard-setting

²² Canadian Chemical Producers' Association, Brief to the Committee, September 1994, p. 14.

arrangement could undermine the federal government's accountability for those standards for which it has legal and political responsibility. Accountability requires a transparent process in which it is clear at all times who is responsible for establishing, administering and enforcing the standards. Third, standard setting must be based on sound scientific analysis. The development of standards to control toxic substances, in particular, requires an elaborate scientific apparatus. All levels of government rely on the valuable information provided by the federal research institutes on environmental and human health. Indeed, few provinces have the resources to duplicate the scientific capability of the federal government.

In a letter dated January 31, 1995 to the Committee Chairman about the CCME harmonization initiative, the Deputy Minister of Environment Canada stated that "the federal government's role in the development of national standards will be strengthened". The Committee agrees with the sentiment expressed by the Deputy Minister and urges the federal government to retain responsibility and accountability for developing national environmental standards for the Federal House, for environmental issues that are explicitly within federal jurisdiction, and for environmental issues of national concern, such as toxic substances.

The Committee ... urges the federal government to retain responsibility and accountability for developing national environmental standards for the Federal House, for environmental issues that are explicitly within federal jurisdiction, and for environmental issues of national concern, such as toxic substances.

In addition, the federal government should assume a leadership role in ensuring that appropriate jurisdictions develop effective, timely and harmonized standards for those issues over which the federal government does not have exclusive jurisdiction and the resolution of which requires inter-jurisdictional cooperation or which should, ideally, be addressed on a national basis. As noted above, these issues include substances or activities which pose a local risk but which are common to most provinces; cases where an effective national resolution of the issue might have international trade implications for Canadian industry; and cases where the issue is the subject of an international agreement.

In recommending that the federal government retain responsibility for establishing national standards, the Committee also recommends continuing the long tradition of cooperation and consultation in the establishment of various national environmental

standards such as ambient air quality objectives.²³ Moreover, the Committee believes that the federal government needs to develop additional innovative approaches to standard-setting because of the diminishing resources available to it.

CONCLUSION

Canadians have come to expect all levels of government to play a strong role in health and environmental protection. As the federal, provincial, territorial and municipal governments have expanded their activities in response to the growing number and importance of environmental issues, the scale and complexity of their interaction has increased. This increase has blurred previously sharp lines of responsibility and raises the question of what role the federal government should now play in environmental protection. The Committee believes that the federal government must play an important leadership role in ensuring a minimum level of health and environmental protection for all Canadians. This role will range from taking the regulatory lead on issues of national concern, such as toxic substances, to providing leadership in coordinating inter-jurisdictional initiatives.

The Committee believes that the federal government must play an important leadership role in ensuring a minimum level of health and environmental protection for all Canadians.

RECOMMENDATION 1

The Committee recommends that the Government of Canada affirm that it has an important role to play in human health and environmental protection management and, in particular, that it will:

- a) Promote sustainable development in all its programs and policies.
- b) Demonstrate leadership by applying exemplary pollution prevention and environmental assessment practices to its own operations.
- c) Provide environmental protection in relation to issues that are assigned to federal jurisdiction by sections 91 and 92.10 of the *Constitution Act, 1867*, such as trade and commerce, sea coasts and inland fisheries, navigation and shipping, Indians and lands reserved for Indians, census and statistics, and interprovincial transportation.

²³ For summaries of federal provincial cooperation on standard and objective setting, see Alastair Lucas, "Harmonization of Federal and Provincial Environmental Policies: The Changing Legal Framework," in Saunders, ed., *Managing Natural Resources in a Federal State, Essays from the 2nd Banff Conference on Natural Resources Law*, Carswell: Toronto, 1986, p. 33; and Donna Tingley, *Models and Instruments for Harmonization*, prepared for the CCME, 1994.

- d) Establish national standards for environmental issues of national concern, including products of biotechnology, toxic substances, pesticides, and substances and activities that pose a transboundary threat to the environment.**
- e) Be the main instrument in conducting and supporting scientific research into environmental and health protection issues.**
- f) Develop, in consultation with the provinces, territories, Aboriginal peoples and stakeholders where appropriate, pollution prevention and control strategies to protect human health and ecosystems.**
- g) Ensure that federal regulations are enforced rigorously and uniformly, in collaboration with the provinces and territories where appropriate.**
- h) Provide leadership in the resolution of issues requiring inter-jurisdictional solutions.**
- i) Provide leadership in international trade and environment issues and organizations.**
- j) Promote voluntary action on pollution prevention and sustainable development.**
- k) Promote the development of “best practices” for environmental protection, including, for example, full cost accounting, environmental management systems, the application of ecosystem approaches and pollution prevention techniques.**
- l) Publish regular reports on the state of the environment.**

THE CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): HISTORY AND DESCRIPTION

HISTORY

There are few environmental problems plaguing human society that do not have some relevance to Canada. Stratospheric ozone depletion, smog, acid rain, air pollution, loss of biodiversity, hazardous wastes and climate change all pose serious threats to Canada's environment and to every Canadian. Toxic substances are a significant health threat. Studies have shown that many of these have an adverse effect on wildlife populations and pose similar risks to human life and health.

In light of these problems, Canadians must ask themselves if the environmental legislation now in place is effective. This Report, which follows a full year of consultation, study and discussion, provides an in-depth review of a major piece of federal legislation, the *Canadian Environmental Protection Act* (CEPA). However, a single piece of legislation cannot be reviewed in isolation. A serious effort was therefore made to identify and consider a broad spectrum of existing environmental problems to ensure that our review of CEPA conformed to Canadian environmental reality.

A decade ago, Environment Canada identified five priority issues toward which the department would direct special attention. Four of these priority issues were acid rain, water management, climate change, and the North — that region of Canada north of the 60th parallel. The fifth issue focused on substances, principally chemicals, having (or suspected of having) toxic effects on human and environmental health. Such substances represented a continuing problem in Canada as in other industrialized nations.¹ The issue of how to protect Canadians and their environment from the harmful effects of toxic substances forms the principal part of this Report.

It has long been known that the same substances that provide important economic and social benefits to Canadians may also have the potential to inflict significant short- and long-term harm on human and ecosystem health. Since the end of World War II, the variety and quantities of anthropogenic (made by humans) chemicals used by society, and released into the environment, have increased to an extent almost beyond measure.

Not only has the number of chemicals increased dramatically over the past 20 years or so, but so have the quantities of them that are produced. Global production of organic chemicals, for example, increased from about 1 million tonnes a year in the 1930s to 7 million in 1950, 63 million in 1970 and

¹ Environment Canada, *1985-86 Estimates, Part III, Expenditure Plan*, p. 3:13-14.

about 250 million in 1985. Annual production now tends to double every seven or eight years.²

Canada's early response to the threats posed by toxic chemicals was contained in the *Environmental Contaminants Act* (ECA). Proclaimed in 1975, the ECA provided a framework to control both existing and new harmful substances. It was not long, however, before the federal government recognized that the ECA was inadequate to deal with the variety of problems posed by toxic substances.

Not only has the number of chemicals increased dramatically over the past 20 years or so, but so have the quantities of them that are produced. Global production of organic chemicals, for example, increased from about 1 million tonnes a year in the 1930s to 7 million in 1950, 63 million in 1970 and about 250 million in 1985. Annual production now tends to double every seven or eight years.

The ECA had a number of shortcomings; it lacked clear administrative priorities and provided no guidance on the ranking of substances. There was no provision for public input into the regulatory process and there were no measures to allow for public scrutiny of government activity under the Act.³ There were also shortcomings in the notification and information gathering provisions which made it virtually impossible to screen new chemicals before they were introduced into Canada.

In 1985, two task forces were established by the federal government to review the ECA and to develop an approach to better deal with toxic chemicals. One task force identified the main problems with the ECA, while the other focused on the management of toxic chemicals. Noting that many chemical substances and significant stages in the chemical lifecycle were not covered by existing legislation, one of the task force reports set out a new and comprehensive approach to managing chemicals and recommended a system to manage toxic chemicals from "cradle to grave".⁴

At much the same time, the public began to pressure the government for better control of toxic substances. Incidents such as the chemical contamination caused by leakage from the Love Canal disposal site near Niagara Falls, New York, the chemical plant leak in Bhopal, India and the "toxic blob" found in the St. Clair River near Windsor, Ontario, combined with evidence of death, reproductive problems and mutations in wildlife populations, fuelled public concern about the effects of toxic

² United Nations Environment Programme, Hazardous Chemicals, UNEP Environment Brief No. 4, p. 2.

³ Rodney Northey, "Federalism and Comprehensive Environmental Reform: Seeing Beyond the Murky Medium", *Osgoode Hall Law Journal*, Vol. 29, No. 1, 1989, p. 132-133.

⁴ Environment Canada, *From Cradle to Grave: A Management Approach to Chemicals*, September 1986.

substances on human health and the environment. Reinforcing these concerns was scientific evidence which demonstrated that many chemicals could be toxic, even in very small amounts, given prolonged exposure to them.

In 1986, in response to these public concerns and the recommendations of the two task forces, the federal government produced preliminary draft environmental legislation to replace the ECA. Later that year, the draft was followed by a discussion bill and an extensive public consultation process. Following that round of public consultation, the federal government concluded that it would be appropriate to group several aspects of environmental protection under one statute. A bill was drafted to that effect and on June 26, 1987 Bill C-74, the *Canadian Environmental Protection Act* (CEPA), was introduced in the House of Commons.

CEPA underwent extensive amendment at the Parliamentary committee stage. Well over 100 proposed amendments were brought before the committee by the government and by members of the opposition parties. One year after Bill C-74 was introduced, it had passed all stages of the legislative process and was proclaimed on June 30, 1988.

DESCRIPTION

CEPA is a complex statute which incorporates the provisions of several pre-existing federal laws. CEPA replaced the *Environmental Contaminants Act* and subsumed the *Clean Air Act*, the *Ocean Dumping Control Act*, the nutrient provisions of the *Canada Water Act* and certain provisions of the *Department of the Environment Act*. Among other things, CEPA gives the federal government authority to regulate toxic substances throughout their life cycle; establish environmental quality objectives, guidelines and codes of practice; regulate the content of fuels; regulate the nutrient concentration in cleaning agents and water conditioners; control ocean dumping; regulate waste handling and disposal practices as well as the release of emissions and effluents from federal departments, Crown corporations and agencies; and regulate sources of air contamination that violate international agreements or create air pollution in other countries in cases where the provinces cannot or will not act to control the source of the contamination.

The Act is administered by Environment Canada, but both Environment Canada and Health Canada are involved in the assessment of substances to determine whether they are toxic, and in the development of regulations and guidelines.

CEPA is divided into nine Parts, the first seven of which contain the principal provisions. The main elements of these seven Parts are described below.

Part I — Environmental Quality Objectives, Guidelines and Codes of Practice

Part I (sections 7-10) of CEPA allows for the creation of non-mandatory environmental quality objectives, guidelines and codes of practice (section 8). Similar

authority is vested in the Minister of Health with respect to health-based objectives, guidelines and codes of practice (section 9). Part I also gives the Minister of the Environment authority to establish environmental monitoring stations, collect and publish data on environmental quality in Canada, conduct research and studies on pollution control and environmental contamination, formulate pollution control plans, and publish information on the quality and the state of the Canadian environment (section 7).

Since CEPA came into force a number of non-regulatory instruments have been developed under Part I. The Environmental Choice Program, Environment Canada's eco-labelling program to identify products and services that are environmentally preferable, was also established under this Part. Environment Canada published the second report on the state of the national environment (*The State of Canada's Environment—1991*) pursuant to section 7(1)(f)(ii) of CEPA. The first such report was published in 1986, prior to CEPA's inception, but they now have been discontinued.

Part II — Toxic Substances

Part II (sections 11-48) of CEPA focuses on toxic substances. For the purposes of this Part, a substance is toxic if it enters or may enter the environment in a quantity or concentration that may have a harmful effect on the environment or may endanger human life or health (section 11).

Part II distinguishes between new and existing substances and prescribes reporting requirements for new substances. All chemicals known to have been in use in Canada between 1984 and 1986 (existing substances) are found in an inventory called the Domestic Substances List (DSL). Published in the *Canada Gazette* in 1991, the DSL includes well over 20,000 substances.

Substances not on the DSL cannot be manufactured in or imported into Canada in excess of prescribed quantities without having first been assessed under CEPA (sections 25-32). The *New Substances Notification Regulations*, which came into effect on July 1, 1994, set out the information required from manufacturers and importers.

Substances on the DSL are exempt from CEPA's New Substances provisions. However, substances on the DSL that are of concern to human health or the environment can be placed on the Priority Substances List (PSL) for priority assessment to determine whether they are toxic. The first PSL, containing 44 substances, was published in 1989.

All aspects of the life cycle of toxic substances can be controlled under Part II. Once a substance has been determined to be toxic, whether through the PSL process, the New Substances provisions or under section 33 (where the Governor in Council is satisfied that a substance is toxic), and placed on the List of Toxic Substances, the Governor in Council has broad authority to regulate all aspects of the substance including its

manufacture, importation, labelling, distribution, storage, use, release and disposal (section 34).

Measures to address the dangers arising from the release of toxic substances into the environment, including provisions for the reporting of releases to inspectors and for emergency and remedial measures, are found in sections 36 to 40 of the Act. In addition, section 35 gives the Minister of the Environment, with the concurrence of the Minister of Health, the authority to take immediate action in the form of an interim order when a substance is believed to be toxic or where a substance on the List of Toxic Substances is not adequately regulated and represents a significant danger to the environment or to human life or health. Since CEPA came into force in 1988, the Ministers have issued only a few interim orders.

The export and import of toxic substances and hazardous wastes are also covered under Part II. Toxic substances, the use of which is prohibited in Canada, are included on the "List of Prohibited Substances". Except in limited circumstances, these substances cannot be exported from Canada (section 41). Other requirements apply to substances, the use of which is substantially restricted by federal law (section 42).

Persons wishing to import or export hazardous wastes are subject to notification requirements under CEPA (section 43). The *Export and Import of Hazardous Waste Regulations*, which came into force in November 1992, establish the conditions for the export from and import into Canada of hazardous wastes for recycling or disposal and allow Canada to meet its international obligations under the Basel Convention with respect to the transboundary movement of hazardous waste.

Fuels are also regulated under Part II. CEPA prohibits the production, importation, use or sale in Canada of any fuel that contains additives, components or elements that exceed prescribed concentrations (sections 46-47). These provisions were used to restrict the use of leaded gasoline in Canada.

Part III — Nutrients

Part III (sections 49-51) regulates the nutrient content of cleaning agents and water conditioners. Prior to the incorporation of this Part into CEPA, these substances were regulated under the *Canada Water Act*. To date, only the concentration of phosphorous in laundry detergents is regulated under Part III.

Part IV — Federal Departments, Agencies, Crown Corporations, Works, Undertakings and Lands

Part IV (sections 52-60) deals with the application of CEPA to federal lands, works and undertakings. This Part was intended to fill the so-called "regulatory gap" which

exists because federal works, lands and undertakings are not, for the most part, subject to provincial environmental laws.⁵

Under Part IV, the Minister of the Environment is given authority to regulate waste handling and disposal practices, and emissions and effluents from federal departments, Crown corporations, boards and agencies (section 54(2)). The Minister is also empowered to make regulations that apply to federal lands, works and undertakings where there is no express authority under another federal law applying to those entities to make regulations to protect the environment and where the concurrence of the responsible federal minister is obtained (section 54(1)).

To date, there has been very little activity under Part IV. Details of the activity taken under this Part are presented in Chapter 11.

Part V — International Air Pollution

Part V (sections 61-65) of CEPA gives the Minister of the Environment authority to regulate domestic sources of air contaminants that create air pollution in other countries or violate international agreements. Before acting under this Part, the Minister must have endeavoured unsuccessfully to have the provinces control or prevent the pollution. Where the source of the contaminant is a federal work or undertaking, however, provincial consultation is unnecessary. To date, no regulations have been issued under Part V.

Part VI — Ocean Dumping

Formerly the *Ocean Dumping Control Act*, Part VI (sections 66-86) of CEPA regulates the disposal of material at sea, including destruction by incineration at sea, and the loading of wastes on ships, aircraft, platforms and other structures for disposal at sea.⁶ This Part is designed to implement Canada's obligations under the London Convention, 1972.

Disposal at sea is prohibited unless carried out in accordance with a permit granted under the Act. Permits may cover all aspects of the disposal process including timing, handling, storing, loading, placement at the disposal location and monitoring. Most of the permits for ocean dumping under CEPA are for dredged material, mostly from harbours. In 1993-94, excavated and dredged material together accounted for more than 98 percent of total quantity dumped.⁷ Fifty-eight percent of the permits in that year were for fisheries waste, although this category accounted for only 1.31 percent of the quantity dumped.

⁵ There are some cases in which federal works and undertakings can be subject to provincial laws of general application. This is described in Chapter 11.

⁶ Environment Canada, *Canadian Environmental Protection Act, Report for the Period April 1993 to March 1994*, Ottawa 1994, p. 31.

⁷ *Ibid.*, p. 33.

Part VII — General

Part VII (sections 87-139) of CEPA contains several general provisions relating to the establishment of boards of review, inspections, investigations, offences and penalties.

In certain cases, CEPA allows members of the public to file a notice of objection to a decision or proposed regulation and to request a board of review. In some cases a board is required; in others, the creation of a board is discretionary (section 89). CEPA also allows individuals to request an investigation of an alleged violation of the Act (section 108).

Part VII sets out the various offences under CEPA and the penalties associated with them. Penalties include imprisonment, fines or both. In addition to fines or imprisonment, CEPA gives the courts considerable leeway in imposing other penalties for offences (sections 129-131). For example, offenders can be prohibited from engaging in activities that would cause a repetition or continuance of the offence; directed to remedy the harm they have caused to the environment and to compensate the government for the costs it has incurred in taking remedial or preventative action; ordered to perform community service or pay for research into the ecological use and disposal of the substance in respect of which the offence was committed; or ordered to pay a fine equal to the monetary benefit acquired as a result of the commission of the offence.

Other Provisions

Like Part VII, other provisions of CEPA have implications for the Act as a whole. Among the most important of these are the provisions allowing for consultation and agreements with the provinces and the territories.

CEPA provides for three mechanisms to promote federal-provincial cooperation: the Federal-Provincial Advisory Committee (FPAC), administrative agreements, and equivalency agreements.

FPAC is composed of representatives from Environment Canada, Health Canada and each of the provinces and territories. Established under section 6 of CEPA, its purpose is to establish “a framework for national action and taking cooperative action in matters affecting the environment and for the purpose of avoiding conflict between, and duplication in, federal and provincial regulatory activity”. The FPAC advises the Minister of the Environment on proposed regulatory initiatives and other CEPA-related environmental matters.

CEPA also provides for intergovernmental agreements. Under section 34(6) and section 98, the federal government can sign equivalency or administrative agreements with the provinces and territories. Administrative agreements are essentially “work-sharing” agreements that allow the administration of CEPA regulations to be

carried out by the provinces and territories. These multi-faceted agreements, under which federal regulations continue to operate, may cover activities such as monitoring, reporting, inspection and enforcement.

Unlike administrative agreements, equivalency agreements suspend the application of a CEPA regulation in the province or territory with which the agreement has been signed. CEPA regulations, however, will continue to apply to federal lands, works and undertakings located within the relevant province or territory.

THE NEED FOR CHANGE

THE ENVIRONMENTAL RECORD

Canadians today face a number of environmental problems. Some of these are relatively new, while others have been recognized for many years. We know that plant and animal species are rapidly disappearing as their habitats become polluted and destroyed. We are undermining basic ecological life support functions and losing unknown quantities of potentially valuable and irreplaceable genetic resources. The burning of fossil fuels and the presence and release of other pollutants in the environment are affecting the earth's climate and the quality of the air we breathe. Toxic substances are contaminating our air, land and water, and endangering the life and health of many species. In some cases excessive resource exploitation threatens the livelihood of some of our fishing and forestry communities.

These problems stem overwhelmingly from human activity. Environmental degradation is directly related to our ever-increasing exploitation of natural resources and technological advances. Burgeoning industrial activity produces concomitant increases in the consumption of goods and services, thereby placing stresses on the earth's riches.¹

The problem posed by the production and use of industrial chemicals in our society is a particular concern. More than 35,000 chemicals are used commercially in Canada, and nearly twice that number are used worldwide.² Although we do not know how many of these pose a threat to human health or the environment, past experience tells us that chemicals once thought to be harmless may, in fact, be dangerous.

The problem posed by the production and use of industrial chemicals in our society is a particular concern. More than 35,000 chemicals are used commercially in Canada, and nearly twice that number are used worldwide. Although we do not know how many of these pose a threat to human health or the environment, past experience tells us that chemicals once thought to be harmless may, in fact, be dangerous.

¹ Doug Macdonald, *The Politics of Pollution*, McClelland & Stewart, Inc., Toronto, 1991, p. 8-9.

² Environment Canada, *The State of Canada's Environment*, Ottawa, 1991, p. 21-7.

Our society and way of life are highly dependent on chemicals. We have derived extensive benefits from their use; lives have been saved, human suffering reduced, economic productivity increased and the quality of life improved. Yet, these benefits have been tempered by increasingly disturbing evidence of the hazards associated with their use.

Environment Canada's 1991 report, *The State of Canada's Environment*, aptly describes the dilemma presented by the use of chemicals in modern society:

Chemicals can be both highly beneficial and highly dangerous. In seeking to reap the abundant benefits they offer, people may also inadvertently run the risk of doing serious harm to the environment and to human health. The problem that faces Canada, as a society that is highly dependent on chemicals, is how to realize the benefits of these substances while avoiding the damage they may cause or, at least, reducing the risk of such damage to acceptable levels.³

An excellent example of the mixed blessing posed by industrial chemicals is the case of DDT. This insecticide reduced the levels of certain diseases and increased agricultural productivity. However, writing in her 1962 book *Silent Spring*, Rachel Carson pointed to hazards such as physical abnormalities and reproductive problems in wildlife associated with the use of DDT, and raised public awareness of the issue of chemical contamination. Other widely-used chemicals such as ozone depleting substances, PCBs and chlorinated organic compounds present similar benefits and risks.

It is now known that some toxic substances have the capacity to persist and accumulate in the environment to the point where they pose a danger to human and ecosystem health. The adverse effects of persistent toxic substances have been noted by the International Joint Commission:

... mounting evidence continues to reinforce concerns about the effects of persistent toxic substances. Long-term exposure of fish, wildlife and humans to these substances has been linked to reproductive, metabolic, neurological and behavioural abnormalities; to immunity suppression leading to susceptibility to infections and other life-threatening problems; and to increasing levels of breast and other cancers. Available evidence also points to long-term reproductive and intergenerational effects.⁴

Scientists now realize that the dimensions of toxic chemical pollution have changed significantly over the past few decades. Once considered a local issue, chemical pollution is, in fact, a global problem. Toxic chemicals are carried long distances by wind and water currents. Contamination created in Canada can affect other countries and vice versa. Indeed, it is now evident that many areas of Canada are affected by pollution created beyond our borders. The Committee learned that this phenomenon is

³ *Ibid.*, p. 21-4.

⁴ International Joint Commission, *Seventh Biennial Report on Great Lakes Water Quality*, 1994, p. 4.

particularly evident in northern Canada where wildlife contains traces of pesticides and PCBs originating in the more populous southern industrial and agricultural regions of North America, Europe and Asia. Indeed, there are high levels of PCBs in the breast milk of some northern aboriginal women.

Since the publication of *Silent Spring*, public concern about the environment and the effect of pollution on human health has increased. A study of the public's perception of environmental issues in Canada, commissioned by Environment Canada in 1988, revealed that nearly 90 percent of the people surveyed felt that human health had been affected by pollution. Opinion surveys continue to show the presence of toxic chemicals in the environment as a major concern.⁵

CEPA was designed to address many of the concerns raised in connection with toxic substances. The preamble to the Act recognizes the fact that the presence of toxic substances in the environment is a matter of concern to all Canadians, that these substances cannot always be contained within national boundaries and that many environmental issues must, of necessity, be dealt with in the international arena.

Evident in 1988 when CEPA became law, these concerns are even more pressing today. Increasing examples of loss of biodiversity, exposure to mounting levels of toxic substances, problems with toxic substances that travel through different environmental media, and the further regionalization and globalization of environmental issues argue for a strong environmental protection act to tackle these problems and concerns.

ACHIEVEMENTS UNDER CEPA

In its early days, CEPA was described as "the cornerstone of federal environmental legislation".⁶ CEPA, it was claimed, would guarantee a safer environment for all Canadians and provide for better enforcement and tougher punishment of polluters.⁷

During the nearly seven years that CEPA has been in force, there has been some activity under certain parts of the Act. The first Priority Substances List (PSL) was created in 1989 and, by the autumn of 1995, 25 of the PSL substances had been assessed as toxic. Six substances on the PSL have been declared non-toxic. No determination of toxicity was made for the remaining 13 substances, and these were subsequently removed from the PSL by the Minister of the Environment and the Minister of National Health and Welfare. Work on the second PSL is now underway. In 1991, the Domestic Substances List and the Non-domestic Substances List were published.

Previously existing regulations under the *Environmental Contaminants Act*, the *Clean Air Act*, the *Canada Water Act* and the *Ocean Dumping Control Act* were

⁵ Health and Welfare Canada, *A Vital Link: Health and the Environment in Canada*, Ottawa, 1992, p. 8.

⁶ Environment Canada, *Canadian Environmental Protection Act, Report for the Period Ending March 1990*, p. 1.

⁷ Janet Davies, "CEPA — The Canadian Environmental Protection Act," *International Journal of Air Pollution Control and Waste Management*, September 1988, Vol. 38, No. 8, p. 1111.

continued under CEPA. In addition, the government has issued a number of new regulations under the Act. The regulation banning the use of lead in most motor fuels has helped reduce lead levels in the atmosphere. Other regulations ensure that polychlorinated biphenyl (PCB) material is stored in a manner and under conditions that do not pose a threat to the environment. Subsequent to the terms of the Montreal Protocol, ozone depleting substances (ODS) have either been banned or scheduled for elimination. Chlorinated dioxins and furans in effluents produced by the pulp and paper industry have been reduced, and the notification requirements for new chemicals and polymers have been promulgated. CEPA has also been used to implement Canada's international obligations with respect to the transboundary movement of hazardous wastes and the export of toxic substances.

On the non-regulatory side, various environmental quality guidelines, codes of practice and objectives have been issued under Part I. A number of these instruments have been issued in conjunction with the Canadian Council of Ministers of the Environment (CCME).

CEPA was intended to embody a new approach to the enforcement of federal environmental law. Issued in 1988, CEPA's *Enforcement and Compliance Policy* was based upon the principle of mandatory compliance with the Act and its regulations.⁸ One of the first such policies issued by any level of government in Canada, it was considered a model when it was introduced.

Mechanisms to improve intergovernmental cooperation have evolved. The Federal-Provincial Advisory Committee (FPAC) has gained general acceptance as a mechanism for provincial input into CEPA-related activities. After a slow start, some headway is being made on intergovernmental agreements. To date, administrative agreements with Quebec, British Columbia, Saskatchewan and Yukon, and an equivalency agreement with Alberta, have been signed.

THE CHALLENGE CONFRONTING CEPA

Despite these achievements, it is clear to the Committee that CEPA has not effectively addressed Canada's pressing environmental problems. Indeed, as the Canadian Institute for Environmental Law and Policy stated in its brief to the Committee "... it is difficult to identify ways in which environmental quality in Canada has, to date, been significantly affected by the existence of CEPA".⁹ Canada continues to be burdened with significant environmental problems. While some of these are outside the purview of the Act, others stem from the very substances and activities that CEPA was intended to address.

Significant levels of chemical contamination continue to threaten Canada's natural environment. In its brief to the Committee, the Canadian Environmental Law

⁸ Environment Canada, *Canadian Environmental Protection Act, Enforcement and Compliance Policy*, 1988, p. 9.

⁹ Canadian Institute for Environmental Law and Policy, *Brief to the Committee*, September 1994, p. 1.

Association pointed to scientific studies which show that a large number of chemicals have the potential to disrupt the endocrine system of animals, including humans.¹⁰ In recent years there has been growing concern that some chemicals — particularly persistent, bioaccumulative, chlorinated hydrocarbons — may be the cause of a variety of serious effects, including reproductive, developmental and behavioural abnormalities, in both humans and other animal species. The possible effects of such chemicals on the reproductive integrity of humans, particularly the suggested estrogenic¹¹ properties of some pollutants, have now developed into a priority issue.

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Few toxic substances have been controlled, much less eliminated under CEPA. Indeed, since CEPA was proclaimed in 1988, 25 of the 44 substances contained on the first Priority Substances List (PSL1) have been declared toxic, yet only a small number of these have been regulated. One of the central challenges faced by the Committee has been to find ways to improve the effectiveness and efficiency of identifying and preventing the generation and use of toxic substances.

Hazardous wastes continue to be a major environmental problem in Canada. These wastes have a very high profile in the inventory of environmental problems, largely because of the gross mishandling practices in the past when dangerous wastes were often simply dumped into unsecured landfills, or abandoned on decommissioned industrial sites. The ideal solution to the problem of hazardous industrial wastes, of course, is to avoid their production in the first place. The present role of CEPA in dealing with hazardous wastes is necessarily limited, however. The legislation regulates the transboundary movement of such wastes. Should it, as well, focus on reducing their production at source?

Hazardous air pollutants (gaseous, aerosol or particulate contaminants found in ambient air) continue to present a threat to human and ecosystem health. These pollutants, which winds often carry long distances from their sources, are of ever-increasing concern. Especially worrying is the presence of these substances in the

¹⁰ Canadian Environmental Law Association, Incorporating Pollution Prevention into Part II of CEPA: An Agenda for Reform, Brief to the Committee, September 19, 1994, p. 1.

¹¹ Estrogenic substances are those that have the capacity to stimulate the development of female sex characteristics. Such substances can impair the development of human male embryos.

Arctic region where it is known that persistent bioaccumulative chemicals such as DDT and PCBs are found in significant amounts. Another concern is the airborne transmission of dioxins and furans, believed to contribute to the incidence of certain cancers. Many chemicals are known to accumulate and biomagnify in the tissues of wildlife species and in humans, and may constitute a significant risk to the health of Canadians. Should CEPA's current minimal role in preventing air pollution be strengthened?

Canada's oceans also continue to suffer from environmental degradation. Up to 80 percent of the total amount of pollutants — sediments, nutrients, and chemical and biological contaminants — in the oceans come from land-based sources.¹² Most of these pollutants are not regulated under CEPA. The Act's ocean dumping provisions have limited application to this problem, however, since they cover only the dumping into the ocean of certain types of materials at specific locations. Can, or should, CEPA play a larger role in combatting marine pollution?

CEPA was also designed to provide mechanisms to reduce the environmental impact of federal government activities. These activities are significant for a number of reasons. As the "largest business" in Canada, the federal government has a significant direct environmental impact, particularly in relation to underground fuel storage, solid wastes, site contamination and the management of PCBs and ozone depleting substances.

There are also important indirect and symbolic dimensions to federal stewardship. Federal procurement practices, for example, could be used to stimulate markets for green products. And, at a symbolic level, federal leadership in applying model environmental standards to its own activities could send an important message to the private sector about the cost-effectiveness and significance of such initiatives.

Part IV of CEPA was designed to provide the federal government with the regulatory framework for dealing with these matters. Regrettably, implementing Part IV has been a low priority for Environment Canada, however, and virtually nothing has been done. Indeed, as one study noted:

*The federal government's failure to implement controls equivalent to provincial regulations in areas as diverse as underground storage tanks, hazardous waste management and air emissions has created the perception, if not the reality, of a double standard.*¹³

This being the case, how can the federal government ask Canadian industry, especially the governments of the provinces and of other countries, to improve their environmental records when it has very obviously itself failed to take effective measures to protect the environment?

¹² Environment Canada, *The State of Canada's Environment*, Ottawa 1991, p. 4-4, 5.

¹³ Environment Canada, *Evaluation of the Canadian Environmental Protection Act (CEPA)*, Final Report, December 1993, p. 112.

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Products of biotechnology are becoming more widely developed and used. These products are included under Part II of CEPA and may be assessed as new substances provided they are not regulated under another federal law. Should CEPA be broadened to deal with these products in a more comprehensive way?

Added to these continuing problems are a host of new issues that have important implications for CEPA.

Declining biodiversity and ecosystem degradation are major environmental concerns. It is now well known that widespread degradation exists in all ecozones in Canada, including the very remote areas. Degradation is particularly evident in the Great Lakes region, the St. Lawrence Valley, the Fraser River Basin, Vancouver Lower Mainland, the Strait of Georgia, the west coast of Vancouver Island and Atlantic coasts and harbours. Yet CEPA currently provides little guidance as to how such "ecosystem based" problems can or should be addressed, or what priority the government should assign them in relation to the other issues now explicitly addressed in CEPA.

Since the late 1980s the number of environmental issues that are being resolved at the international level has increased. Fuelled in large measure by the recognition that some of the major threats facing the earth's environment have transboundary and, in some cases, global dimensions, nations are increasingly seeking international solutions to their environmental problems. Indeed, there is a growing acceptance that international action may be the only practicable way to deal with many of the most important environmental problems of the future.

Accordingly, the management of human and ecosystem health issues is becoming subject to increasing levels of international coordination, where standards and targets are agreed to internationally but implemented through domestic action. Domestic legislation, therefore, must be able to accommodate the increasing complexity and scope of international policy requirements and coordination.

The emergence of free trade as a strategy for global economic development also has important implications for CEPA. For example, the increased emphasis on international competitiveness means that CEPA must focus on preventing pollution before it occurs, rather than continuing to impose the high costs and possible competitive disadvantages of remediation approaches. Increased globalization also means that there will be pressure for the harmonization initiatives of international organizations such as the OECD and the ISO to achieve their goals through, for

example, avoiding unnecessary trade barriers; benefitting from pooling the cost of risk assessments and standard setting; and speeding up and making more efficient domestic standard setting processes. Furthermore, so-called “green consumerism” is putting pressure on countries to adopt sustainable processes and practices or face the prospect of being placed at a competitive disadvantage in international commerce.

International trade agreements will also have implications for enforcement strategies under CEPA. Trade regimes, such as the NAFTA, increasingly require Canada to ensure that its environmental protection measures are enforced effectively and efficiently.

The linkage between trade and environmental measures must be much more explicit in the future. There is a danger that trade agreements may constrain Canada’s ability to develop its own domestic environmental management regime. In the future, CEPA must be structured to account for this and to respond to the domestic environmental agenda.

In addition to these external factors, financial restraints imposed at all levels of government are limiting the resources available for governments to initiate and carry out programs to protect the environment and even human health. In the future, all levels of government must continue to protect human life and health and provide a high level of environmental protection, and find the financial resources needed to carry out these tasks.

CEPA should also reflect the evolving realities of environmental law and policy and the principles and strategies which flow from them. The objective of sustainable development, in its infancy when CEPA was proclaimed, is emerging as a fundamental tenet of government and societal activity, domestically and internationally. Moreover, prevention of pollution is now widely recognized as the most effective way to achieve many environmental objectives at the lowest possible cost. The goal is to move away from the traditional, but costly and increasingly ineffective end-of-pipe solutions toward the prevention of the generation of pollution in the first place.

If CEPA is to tackle the environmental problems facing Canadians today, it must be changed. CEPA does not address enough of these problems. Action under CEPA has been unacceptably slow in assessing toxic substances. Enforcement under CEPA has been inconsistent and disappointing. Fundamentally, CEPA focuses on the wrong issues. By emphasizing the assessment and control of specific substances, CEPA promotes “react and cure” strategies which do not address the root causes of polluting behaviour and do not work toward preventing pollution in the first place.

In some cases these problems can be resolved through structural change involving amendments to correct deficiencies and to fill gaps. Many of the changes, however, must be fundamental, involving a new approach that will completely transform the Act. This new approach, which embraces the concepts of sustainable development, pollution prevention, the ecosystem approach, preservation of biodiversity,

user/producer responsibility, and the precautionary principle, must be the foundation for CEPA and enable it to achieve its fundamental goal of protecting human health and the environment.

GUIDING PRINCIPLES FOR AN EFFECTIVE CEPA

A NEW APPROACH

Canada cannot afford to make environmental mistakes. As recent world experience has shown, the effects — and implications — of serious environmental damage can be devastating. It is therefore essential that policies be put in place now to promote and ensure sound environmental behaviour in the future. Formulating policy that will extend beyond the year 2000 need not be daunting. It will, however, require innovative decision-making from all levels of government, the private sector, and from the general public. To facilitate this, the *Canadian Environmental Protection Act* (CEPA) must take a new approach.

CEPA has an overarching policy goal — to contribute to sustainable development. The Committee believes that the underlying principles that support this goal should include pollution prevention, the ecosystem approach, biodiversity, the precautionary principle, and user/producer responsibility. These principles are central to CEPA and should provide the foundation for the revised Act.

Each of these principles contributes significantly to an integrated environmental strategy. In the pages that follow, each principle is discussed separately, partly because each involves questions of interpretation and scope, but also because each can be more readily understood if considered on its own. Each deserves a place in CEPA in its own right. It remains, however, that, collectively, they have an important role to play in contributing to the ultimate goal of sustainable development.

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The Committee strongly urges the federal government to take immediate steps to incorporate these principles into the Act. The Committee recognizes, however, that it will take time to renew CEPA, particularly with respect to adapting the institutional mechanisms to reflect and support new guiding principles.

SUSTAINABLE DEVELOPMENT

Since promulgation of CEPA in 1988, there has been a growing worldwide acceptance of the concept of sustainable development. In *Creating Opportunity*, the Liberal Party committed itself to aligning the national environmental and economic agendas.

Managing economic development and human growth without destroying the life-support systems of our planet demands of Canadians a fundamental shift in values and public policy. We must aspire to be less wasteful of our natural and human resources, to place greater worth on the welfare of future generations, and to take pride in maintaining a healthy, productive Earth.¹

Although the notion of sustainability has long been advocated, the term “sustainable development” was given international prominence when it was adopted by the United Nations World Commission on Environment and Development and has been in frequent use only since 1987. Since then, the world community, including policy makers, has struggled with attaching interpretations to the concept. There is no single vision of sustainable development; it still means different things to different people in different places. Sustainable development has international, national, political, social, economic, cultural, human health, and ecological dimensions. All are interdependent in ways that people are only now beginning to appreciate.

In 1992, a program of action — *Agenda 21* — was developed by consensus at the United Nations Conference on Environment and Development (UNCED) as the blueprint for achieving sustainable development. At the UNCED the nations of the world concluded that major changes are needed in policies and practices — locally, regionally and globally — so as to integrate environmental, economic and societal decision-making to achieve sustainable development.

The Committee believes that the promotion of sustainable development will require systemic change to integrate economic, social and environmental considerations in all public- and private-sector decisions. New standards will have to evolve; new processes will be required to ensure effective representation of the diverse interests and values related to sustainable development; and, in some cases, new institutions will be required.

Indeed, *Agenda 21* stressed that, irrespective of the level of government, the full range of governing instruments — whether regulatory, market-based, taxation, expenditure, or information-based — have critical roles to play in promoting sustainable development. Moreover, accountability for moving towards sustainable development is not exclusive to governments; it also rests with industry, non-governmental institutions and the general public. Sustainable development calls for the integrated national and international participation of all levels of government,

¹ Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, p. 63.

including Aboriginal peoples, the private sector, a wide range of institutions and interest groups, the media, and the general public.

Some of the most important decisions respecting sustainable development must account for distributional effects within society, among regions, and between generations. Equity is fundamental to sustainable development. Canadian legislators are well aware of the continuing and largely unresolved international debate over the need for additional obligations to be assumed by those, primarily in the developed world, who have used resources in the past in a manner which limits the options of current generations, primarily in developing countries, in the transition to sustainable development.

At present, CEPA makes only one direct reference to sustainable development (section 8(2)(d)); the term was still in its infancy in 1986-87 when the Act was being developed. The Committee heard much testimony centering on whether CEPA required amendment in order to contribute in a meaningful way to the goal of sustainable development.

Witnesses across the country, including representatives of communities, industry, environmental groups, Aboriginal peoples, labour, and government department officials, as well as concerned individuals, expressed their support for the concept of sustainable development. Canadians want to see direct reference to sustainable development in the Declaration and/or the Preamble, indicating that CEPA is a key legislative instrument for promoting sustainable development.

The Federation of Canadian Municipalities had this to say:

The concept of sustainability is the basis for environmental protection, and should be the overriding principle at the foundation of the Act.²

In its brief to the Committee the Canadian Environment Industry Association noted that sustainable development is the *raison d'être* for CEPA. It went on to recommend that the concept be included in the Declaration and that its principles be woven into the fabric of the Act.

... decisions made under CEPA, and indeed the decision-making process of government itself, regardless of the context, be founded upon, and guided by, the principles of sustainable development.³

The Canadian Chemical Producers' Association recommended amending the Declaration to read:

² The Federation of Canadian Municipalities, Brief to the Committee, December 14, 1994, p. 7.

³ The Canadian Environment Industry Association, Brief to the Committee, October 1994, p. 5.

It is hereby declared the protection of the environment through sustainable development is essential to the well being of Canadians.⁴

The Environmental Law Section of the Canadian Bar Association recommended that:

CEPA should be amended to reflect the promotion of sustainable development in its preamble and in Section 2 At the very least, it should be given the generally accepted meaning of the Brundtland Commission.⁵

Some witnesses were in favour of including a definition of sustainable development in the Act. Others argued that the concept is still evolving and should not be defined in legislation until such time as there is a clearer consensus as to its underlying principles. They pointed to the increasing number of domestic laws that refer to sustainable development, based on varying principles. Concern was also expressed by a number of witnesses from the legal profession about the lack of guidance and case law for interpreting such a term.

The Committee agrees that CEPA is an essential component of Canada's overall strategy for furthering sustainable development. The Declaration and Preamble should state that the primary objective of CEPA is to promote sustainable development. The Committee also believes strongly that the law should provide a definition of sustainable development. To omit such a definition from the Act would perpetuate uncertainty and widely differing interpretations of the meaning of the term. In this respect, the Committee is guided by the World Commission on Environment and Development, which defines sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". The Committee particularly likes the notion of the "next seven generations" espoused by Henry Lickers, Director of the Department of the Environment for the Mohawk Council of Akwesasne. Mr. Lickers described his people's insistence that no decision be made without accounting for its impact on the next seven generations.⁶

Sustainable development respects ecological integrity. It is based on the ecologically efficient use of natural, manufactured and social capital, and it promotes equity. It also relies on participatory approaches and requires environmental stewardship by all levels of government and decision makers. The Committee is convinced that by incorporating the principles of pollution prevention, the ecosystem approach, biodiversity, the precautionary principle and user/producer responsibility into CEPA, and by enhancing the rights of the public to participate in and be informed of decisions under CEPA, the Act will go a long way toward contributing to the goal of sustainable development.

⁴ The Canadian Chemical Producers' Association, Brief to the Committee, September 1994, p. 5.

⁵ The Environmental Law Section, The Canadian Bar Association, Brief to the Committee, December 1994, p. 12.

⁶ The "next seven generations" is a concept used by Aboriginal peoples and refers to future generations.

RECOMMENDATION

2

The Committee recommends that a strong statement be included in both the Preamble and the Declaration, as well as in the body of the Act to the effect that the primary objective of CEPA is to contribute to the goal of sustainable development. CEPA should define sustainable development to mean development that meets the needs of the present without compromising the ability of the “next seven generations” to meet their own needs. It requires the adoption of the principles of pollution prevention, the ecosystem approach, biodiversity, the precautionary principle, and user/producer responsibility. These principles apply to the realization of the objective of the Act and govern the interpretation of the Act as a whole.

POLLUTION PREVENTION

Pollution prevention is an essential principle of sustainable development. Its focus is to anticipate and prevent the creation of pollutants and waste through the efficient use of energy, raw materials and other commodities present in or produced by the ecological system. The objective of pollution prevention is healthy ecosystems as well as the conservation of materials and resources for more equitable distribution to current and future generations. In *Creating Opportunity* the Liberal Party noted that “preventive environmental care is the foundation of the Liberal approach to sustainable development”⁷ and committed itself to using the review of CEPA to enshrine pollution prevention as a national goal.

All witnesses, including representatives from communities, environmental groups, Aboriginal peoples, labour, industry and government departments, supported the proposition that environmental protection efforts should be guided by a philosophy of anticipation and prevention. The Canadian Manufacturers of Chemical Specialties Association noted that it strongly supports pollution prevention rather than pollution control. Many witnesses pointed out that CEPA does not now adequately reflect such a philosophy. The Canadian Environmental Network’s Toxics Caucus, for example, observed that CEPA “focuses on the pollution control approach”.⁸ Similarly, the Environmental Coalition of PEI stated “as it currently stands, CEPA is largely pollution control legislation”.⁹

⁷ The Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, p. 63.

⁸ Canadian Environmental Network’s Toxics Caucus, *The Canadian Environmental Protection Act: An Agenda for Reform*, Brief to the Committee, November, 1994, p. 11.

⁹ Environmental Coalition of Prince Edward Island, *Brief to the Committee*, November 7 1994, p. 1.

All witnesses, including representatives from communities, environmental groups, Aboriginal peoples, labour, industry and government departments, supported the proposition that environmental protection efforts should be guided by a philosophy of anticipation and prevention.

The Canadian Environmental Law Association noted that regulatory regimes around the world are moving away from attempting to control toxic chemicals to trying to prevent their use, generation and release.¹⁰ In a similar vein, William Rees, Professor at the School of Community and Regional Planning at the University of British Columbia, reported on his recent observations in several European countries:

There's almost total abandonment of pollution control as an issue or as a focus of environmental policy. The discussion there is all on clean production technologies, on product life cycle analysis, on prevention methods, so the CEPA type of act wouldn't even be necessary. (63:50)

Some witnesses want to see the pollution prevention approach legislated throughout CEPA. The Canadian Environmental Law Association put it this way:

CEPA should include a statement of purpose expressly adopting pollution prevention as a national goal and thus committing the federal government to its furtherance.¹¹

The Environmental Law Section of the Canadian Bar Association also saw pollution prevention as being central to effective environmental protection, recommending that the preamble of CEPA be amended to establish pollution prevention clearly as an underlying tenet of the Act.¹²

Many of those who presented testimony to the Committee expressed a common concern — if pollution prevention is to be defined under the revised Act, what will that definition include? Much of the debate focused on where to draw the line between pollution prevention and pollution control. Some want recycling measures that minimize the amount of pollution ultimately released into the environment included in the definition of pollution prevention, while others contended that such measures do not focus on reducing the demand for, and the use and generation of potentially polluting substances.

The Canadian Environmental Network's Toxics Caucus argued that the most important task with respect to pollution prevention is to define it correctly. The Toxics Caucus recommended that:

¹⁰ Canadian Environmental Law Association, Incorporating Pollution Prevention into Part II of CEPA: An Agenda for Reform, Brief to the Committee, September 1994, p. 1.

¹¹ *Ibid.* p. 16.

¹² The Environmental Law Section, The Canadian Bar Association, Brief to the Committee, December 1994, p. 21.

*CEPA should formally adopt a definition that seeks to avoid the use and generation of toxic substances. The most stringent definition should be used.*¹³

By contrast, the Canadian Chemical Producers' Association, argued that pollution prevention should mean:

... the use of processes, practices, materials and energy that avoid or minimize the creation of pollutants and waste. We feel that it should be clear in the definition that in interpreting these parameters, pollution needs to be understood to be created when a substance is released into the environment and that a waste is something that becomes a waste when it goes for final disposal. (43:11)

The notion of equity was also raised. Witnesses pointed out that in implementing pollution prevention in CEPA, workers and communities should not be made to suffer disproportionately the detriment of such changes. In its submission to the Committee, the Canadian Environmental Law Association stated:

*... efforts must be made to plan the transition from dirty to clean technologies in a fair and equitable way... It is recommended that provisions are developed to ensure there are mechanisms in place to protect workers and communities in the transition to cleaner production processes. These mechanisms should be developed in close consultation with the labour interest and community leaders. Finally, workers should be given a legitimate role in all decisions pertaining to the planning for transition.*¹⁴

In a similar vein, the Ontario Federation of Labour argued that for a legislated pollution protection regime to be successful and credible, the active support and involvement of the labour movement is required at all stages of the process. "Compensation for those losing their job(s) as a result of an environmental issue as part of adjustment and training should be available for workers and their communities".¹⁵

It is the view of the Committee that because pollution prevention focuses on preventing pollution in the first place, rather than on managing pollution after it has been created, it is the most sensible approach to environmental protection. Pollution prevention involves the efficient use of raw materials, energy, water and other environmental commodities. Increasing evidence, internationally, has demonstrated that adopting a pollution-prevention approach not only generates real and significant environmental benefits, it also optimizes economic benefits and reduces economic and legal liabilities. It is also the opinion of the Committee that the adoption of a pollution-prevention approach to environmental protection could act as a catalyst for technological innovation, new market opportunity and wealth creation, thereby

¹³ Canadian Environmental Network's Toxics Caucus, The Canadian Environmental Protection Act: An Agenda for Reform. Brief to the Committee, November 1994, p. 11.

¹⁴ Canadian Environmental Law Association, Incorporating Pollution Prevention into Part II of CEPA: An Agenda for Reform, Brief to the Committee, September 1994, p. 31.

¹⁵ Ontario Federation Of Labour, Brief to the Committee, October 17, 1994, p. 5.

generating considerable savings for Canadian society. As such, pollution prevention is an exemplary means of reinforcing the linkages between the environment and the economy, and hence of promoting sustainable development.

It is the view of the Committee that because pollution prevention focuses on preventing pollution in the first place, rather than on managing pollution after it has been created, it is the most sensible approach to environmental protection.

The Committee recognizes that promoting pollution prevention will require action by governments, corporations and individuals across all sectors of Canadian society and that it has local, regional, national and international dimensions. Like sustainable development, pollution prevention in Canada cannot adequately be promoted by one level of government acting alone, or through a single piece of legislation. While the federal government has considerable power to promote pollution prevention, the provinces, territories and municipalities also have legislative and policy instruments that can significantly influence a shift toward pollution prevention.

The Committee also recognizes that the institutionalization of pollution prevention will require a merging of public policies, particularly those that support industrial competitiveness, job creation and a healthy environment. We also believe that a range of instruments, including legislation, regulation, voluntary action, prices, markets, and government fiscal and economic measures, are needed to play complementary roles in shaping attitudes and behaviour toward the environment.

The Committee notes that the federal government recently released the consultation document, *Pollution Prevention: Towards a Federal Strategy for Action*. This document sets priorities and outlines a general course of action for the federal government. We believe this proposed strategy will move pollution prevention forward in Canada.

The Committee firmly believes that CEPA has a direct role to play in federal government strategy by providing a key legislative base for pollution prevention. CEPA was intended and structured to address targeted pollutants and wastes across Canada. As such, it has a critical role to play in promoting pollution prevention as a national goal in Canada. Pollution prevention, in turn, should be the primary means by which CEPA promotes sustainable development.

The Committee recognizes that CEPA, as currently written, has some potential for implementing pollution-prevention strategies. Nevertheless, by focusing on the assessment and establishment of acceptable levels of pollution on a substance-by-substance basis, CEPA has led to the adoption of control technologies to collect and treat waste at the end of the pipe.

A major shift in emphasis is required in the legislation—from managing pollution after it has been created to preventing pollution in the first place. Methods of preventing pollution must be emphasized and should include pollution-prevention planning, technology development and transfer, the provision of relevant information to the public, and economic instruments that encourage decisions to be made at the point of use or generation, and that promote the efficient use and conservation of natural resources, material and feedstock substitution, product reformulation, and clean production methods and practices.

The Committee recognizes that the transition to clean production and practices will be an on-going process. There will undoubtedly be cases where control and remediation will remain the best available options for achieving specific environmental protection goals. Pollution prevention is neither a stand-alone strategy nor the answer to all environmental problems. We do, however, emphasize the need to consider preventive methods before adopting a pollution control strategy. Where needed, pollution-control strategies should be interim measures only, until adequate pollution-prevention strategies can be put in place. When the principle of pollution prevention becomes a firmly established part of public and private sector activities, the need for costly, non-production measures to control pollution and for remediation will decline.

A major shift in emphasis is required in the legislation—from managing pollution after it has been created to preventing pollution in the first place.

CEPA must place the highest priority on pollution prevention in order to make pollution prevention a distinct alternative to control and remediation, and to place it in the context of environmental protection as a whole. In this regard, the definition of pollution prevention is very important. The Committee supports a definition of pollution prevention focused on preventing the generation and use of substances. A definition that includes activities related to “releases” might be interpreted to endorse continued pollution-control strategies which focus on limiting or cleaning up releases. As we observed above, the Committee’s endorsement of pollution prevention is not intended to preclude continued pollution-control activities, especially where they are the only appropriate means to address an existing problem. The Committee nonetheless strongly desires that CEPA make a clear distinction between pollution control and pollution prevention. Building on the definition used in the federal government’s pollution-prevention strategy, the Committee proposes that pollution prevention be defined in CEPA as the use of processes, practices, materials, products or energy that avoid or minimize the generation and use of pollutants and wastes. This should be done without shifting or creating equal or greater risks to human health or the environment.

As the Committee has already noted, by incorporating pollution-prevention strategies into CEPA, the Act will aid in the transition to cleaner production practices and methods and result in long-term benefits to the environment and the Canadian public. We agree, however, that workers and communities should not be made to suffer disproportionately the adverse effects of changes inherent in the transition to pollution prevention. Efforts must be made to plan the transition in a fair and equitable way. In this regard, it is the Committee's view that, while there will undoubtedly be cases in some communities where the implementation of environmental policies will result in job losses and a decline of the economic base, polluting industries are nevertheless, becoming marginal and are a shrinking source of jobs. Even in the absence of environmental policies, many of the jobs in polluting industries are disappearing. The result is that structural adjustments are taking place in the job market as a result of the adoption of technological innovation in industrial production processes and products to maintain and enhance international competitiveness and to achieve environmental objectives. It is also clear that the burgeoning environmental industry sector presents an opportunity to create jobs and prevent pollution at the same time.

The Committee recommends that pollution prevention be a guiding principle of the Act. We also recommend that a strong statement be included in the Declaration to the Act, to the effect that the purpose of CEPA is to contribute to the goal of sustainable development through pollution prevention. In addition, we recommend that the Preamble clearly establish pollution prevention as the priority approach to environmental protection. For the purposes of the Act, pollution prevention shall mean the use of processes, practices, materials, products or energy that avoid or minimize the generation and use of pollutants and waste. This should be done without shifting or creating equal or greater risks to human health or the environment.

**RECOMMENDATION
3**

The Committee further recommends that the federal government ensure that mechanisms are in place to protect workers and communities during the transition to cleaner production processes and products. These mechanisms should be developed in close consultation with labour organizations and community leaders. Workers and communities should also be given a legitimate role in all decisions pertaining to the planning for transition.

**RECOMMENDATION
4**

POLLUTION PREVENTION

Guiding Principle

Shifting the emphasis in CEPA from controlling to preventing pollution.

Current Approach
Prevention
Control
Clean-up

Shift
→

New Approach
Prevention
Control
Clean-up

Current Approach

Although CEPA does not expressly endorse the pollution control approach, the main emphasis in the Act is on finding acceptable levels of pollution on a substance-by-substance basis, leading to adoption of control technologies to collect and treat waste at the end of the pipe.

New Approach

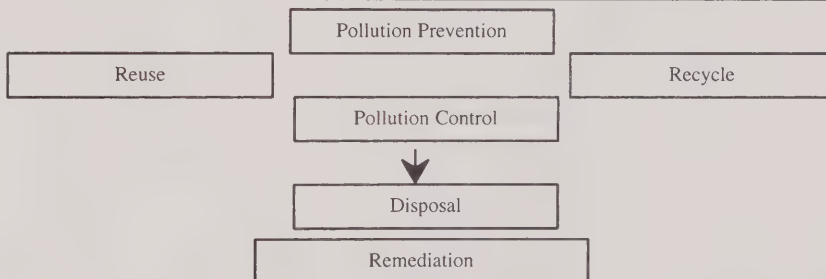
Pollution prevention is the priority approach to environmental protection. Emphasis is placed on a variety of pollution-prevention tools that encourage decisions to be made at the point of manufacture or use and that promote the adoption of clean production methods and practices.

On-going Process

Transition to clean production and practices will take time. There will be cases where control and remediation are the best available options for environmental protection.

Hierarchy of Approaches

The priority for pollution prevention must be reflected in CEPA in order to make pollution prevention a distinct alternative to control and remediation, and to place it in the context of environmental protection as a whole.



Definition

Pollution prevention means the use of processes, practices, materials, products or energy that avoid or minimize the generation and use of pollutants and wastes. This should be done without shifting or creating equal or greater risks to human health or the environment.

Policies and Tools for Preventing Pollution from Toxic Substances

- | | |
|--|---|
| <ul style="list-style-type: none"> ♦ Mandatory Pollution Prevention Plans <ul style="list-style-type: none"> toxic substances sunsetting substances hazardous waste export ♦ Economic Instruments ♦ Regulations ♦ Non-regulatory Measures ♦ Sunsetting ♦ Reduction Targets | <ul style="list-style-type: none"> ♦ NPRI Reporting Requirements on Pollution Prevention ♦ Model Pollution Prevention Plans ♦ Technology Development and Transfer ♦ National Pollution Prevention Information Clearinghouse (awards and success stories) ♦ Public Awareness ♦ Integrated Permitting ♦ Extended Producer Responsibility |
|--|---|



Industrial Adoption of Pollution Prevention Practices and Activities

- | | |
|--|---|
| <ul style="list-style-type: none"> ♦ Efficient use and conservation of natural resources ♦ Material and feedstock substitution ♦ Operating efficiencies ♦ Clean production | <ul style="list-style-type: none"> ♦ Product design ♦ Process changes ♦ Product reformulation ♦ Equipment modifications |
|--|---|

ECOSYSTEM APPROACH

Another principle underlying the goal of sustainable development has to do with the need to focus environmental management efforts on the protection of ecosystem integrity, rather than on the protection of specific environmental components. An ecosystem is a whole system comprised of not only living organisms but also the physical factors forming the environment, such as water, land and air. The ecosystem concept implies “natural balance” and can describe a small-scale unit, such as a pond, as well as a large-scale unit, such as the Great Lakes system. A river, a meadow, a forest, a kelp bed, and a coral reef are all ecosystems.

Ecosystems are often separated into their component parts in an attempt to understand them more easily. Nonetheless, the key insight of the ecosystem approach is that it is the integration and interaction among the living and non-living elements of an ecosystem that enable it to function as a unit. If one part is harmed, the entire ecosystem itself may be affected. Sustained life is a property of ecosystem integrity. Individual species cannot exist on their own. These scientific insights have important implications for environmental policy. Outside influences on an ecosystem’s ability to survive must be taken into account. An ecosystem approach to environmental protection implies a balanced approach toward managing human activities to ensure that the living and non-living elements that shape ecosystems continue to function and so maintain the integrity of the whole.

At present, the wording of CEPA neither promotes nor discourages an approach based on these insights. The broad definition of “environment” contained in the Act relates at least generally to ecosystems. Some parts, particularly the Preamble and Part I, that call for national environmental quality objectives, guidelines and codes of practice, do provide some basis for an ecosystem approach.

The Committee heard much testimony about whether and how to introduce the ecosystem concept more directly into the Act. We grappled with the notion of adopting the ecosystem approach as a guiding principle for the Act. Although the concept is not new, it is not clearly understood. The Committee therefore held a round table at which several leading experts discussed the ecosystem approach. This issue proved to be one of the more difficult for the Committee. In the words of one member:

There is a fundamental issue here . . . I think it goes to the root of what we think the ecological balance should be in our lives. We might define it by asking should we or shouldn't we include ecosystems within the law and should we put it in the Preamble where it looks nice but doesn't have any effect, or should we include it in the body of the law where it carries a heavy onus and responsibility. This is the big challenge before us. (77:37)

In principle, most witnesses were in favour of an ecosystem approach to environmental protection. There were several streams of thought, however, as to whether it should be enshrined in CEPA and, if so, how far it should go.

Some witnesses questioned whether now is the time. Their concern centered on the lack of a clear and understandable definition that means the same thing to most people.

They argued that the scientific basis of the concept may not be sufficiently well developed to support a policy position and it would therefore be premature to include it in CEPA. These witnesses argued that ecosystem management is a laudable policy objective to strive for — but in the future, when the science base has improved. Some of these witnesses also contended that CEPA already embraces an ecosystem approach — at least to the extent of today's understanding. Other than in the Preamble, they are opposed to enshrining it in the operative provisions at this time.

Geoffrey Granville of the Canadian Chemical Producers' Association argued his point of view as follows:

... if you define things before they are ready to be defined, you will really ruin any movement ... the concept is that, yes, we wish to do an ecosystem approach. There's nothing within CEPA that says you will not (cannot) take an ecosystem approach; therefore the issue is one of commitment. We believe taking the ecosystem approach right now is the right way to go. But to define it before the science is ready to define what we mean by ecosystem approach is very dangerous. (77:7)

Other witnesses were in favour of entrenching the ecosystem approach in both the Preamble and operative parts of CEPA. Professor David Rapport of the Faculty of Environmental Sciences at the University of Guelph stated that, "There is already a sufficient body of science to make practical an ecosystem approach, to develop practical criteria for assessing the health of ecosystems". (77:12) He added:

The ecosystem approach suggests the health of ecosystems. That's what I would call medicine's last frontier. Medicine evolved from being concerned with individual health [to] public health, and now we're concerned with the health of ecosystems. I don't view that as a conflict with interests for sustainable development, but the health of ecosystems embodies healthy socio-economic systems, healthy human populations, and healthy biophysical integrity. If you don't have the health of ecosystems, you don't have anything. Our full culture is at risk. (77:39)

Some witnesses argued that the scientific community has had years of experience in using the ecosystem approach, and that enshrining the concept in the legislation would simply encourage further evolution of the concept and the scientific basis underlying an ecosystem approach.

Paul Muldoon of the Canadian Environmental Law Association pointed to the history of the concept as applied in the Great Lakes Water Quality Agreement:

Not only does it adopt the ecosystem approach, but it also fleshes out the implications for the kind of research that lies behind the agreement and the kind of principled ethic that seems to have emerged. To question that approach today seems to be retrospective. We should be prospective. The opportunity to integrate that into the Canadian Environmental Protection Act is now timely and we should move on. (77:10)

The Committee acknowledges the difficulties, uncertainties and limitations involved in using an ecosystem approach to environmental protection, but recognizes the

profound significance of knowing that everything in nature is interconnected. There is a continuity and flow between living things, water, atmosphere and the mineral worlds. Understanding and maintaining the integrity of these relationships are important to conservation, to a sustainable environment, and hence to sustainable development. The Committee agrees, and believes that it is imperative to use an integrated approach to environmental protection, an approach that does more than merely address the individual components of ecosystems. The fact that the scientific basis is still evolving should not be an excuse for inaction. The Committee agrees with the many witnesses who consider the ecosystem approach as “not really being an unknown territory”. There is enough experience to justify moving ahead with such an approach.

The Committee supports the definition of “ecosystems” used in the Convention on Biological Diversity as “a dynamic complex of plant, animal, micro-organism communities and their non-living environment interacting as a functional unit”. We also agree that incorporating the ecosystem approach into the legislation would encourage action and result in decisions affecting the environment being made on the basis of an ecosystem approach. By adopting an ecosystem approach CEPA will be administered in a manner that maintains the functional integrity of ecosystems.

The Committee acknowledges the difficulties, uncertainties and limitations involved in using an ecosystem approach to environmental protection, but recognizes the profound significance of knowing that everything in nature is interconnected. There is a continuity and flow between living things, water, atmosphere and the mineral worlds. Understanding and maintaining the integrity of these relationships are important to conservation, to a sustainable environment, and hence to sustainable development.

The Committee recommends that the ecosystem approach be adopted as a guiding principle of CEPA and that the concept be introduced fully into the Preamble and the Definitions. The Committee also recommends that Part I authorize the development of ecosystem health goals, objectives and indicators, and that the definition of “environment” be amended to include explicit reference to ecosystem integrity. The Act should define ecosystem as a dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit. The Act should define ecosystem approach to mean administering the Act in a manner that maintains the functional integrity of ecosystems.

RECOMMENDATION
5

BIOLOGICAL DIVERSITY

As the concept of ecosystems has evolved, so too has the concept of biological diversity—another of the underlying principles supporting sustainable development.

Biological diversity, or “biodiversity”, is the term used to describe the variety of life on earth. It encompasses all the animals, plants and micro-organisms that co-exist on the planet, and includes the genetic variety within each species and the variety of ecosystems they inhabit. The notion of biological diversity is inherent in employing an ecosystem approach to environmental protection. If the biological diversity in a given ecosystem is in a state of decline, then the ecosystem itself is in danger. The conservation of biodiversity and the sustainable use of biological resources for the benefit of present and future generations is now recognized in the United Nations Convention on Biological Diversity which Canada ratified in December 1992.

CEPA contains no direct reference to biodiversity. However, the Act’s definition of environment is sufficiently broad to relate, at least generally, to biodiversity. Similarly, other aspects of the Act, particularly those dealing with research and monitoring in Part I, also relate to the Convention on Biological Diversity.

Most witnesses acknowledged that other legislation and jurisdictions will play key roles in achieving Canada’s obligations under the Convention on Biological Diversity. Some witnesses also noted that CEPA’s mandate addresses a number of toxic substances which have adverse effects on biological diversity. The Environmental Law Centre (Alberta) Society in its submission to the Committee noted that:

*Toxic substances pose serious threats to the conservation of biological diversity. These threats range from immediate lethal effects through to the disruption of endocrine systems of animals . . . Traditional methods for controlling toxic substances have failed to address the long-term effects of these substances on biological diversity.*¹⁶

For this reason, some wish to include a reference to biological diversity in the Preamble, while others wish to amend the definition of “environment” to include a clear reference to biological diversity. Still others do not wish to include any reference to biodiversity in CEPA at all, arguing that its definition is not yet well established in international law.

*The concept should be allowed to develop on the basis of an international consensus before being written into Canadian law.*¹⁷

The Committee agrees that CEPA is not the only legislation formulated to protect biological diversity in Canada. Other federal laws, including the *Canadian Environmental Assessment Act*, the *Canada Wildlife Act*, the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *National Parks Act*, address some of the conservation and resource management functions set out in the Convention on Biological Diversity. The federal government is currently developing a national endangered species Act. In addition, many aspects of biological diversity fall under provincial jurisdiction.

¹⁶ Environmental Law Centre (Alberta) Society, *Biodiversity and the Ecosystem Approach: Issues for the Five Year Review of the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, p. 10.

¹⁷ Canadian Electrical Association, *Brief to the Committee*, December 1994, p. 6.

Having acknowledged this, the Committee nevertheless believes that there is a role for CEPA in protecting biological diversity and, therefore, in meeting the obligations of the Convention on Biological Diversity. The potential effects on biological diversity must be taken into account when designing strategies for preventing pollution and assessing and controlling toxic substances. Protecting biodiversity is fundamental to maintaining the integrity of ecosystems. Protecting biodiversity also benefits present and future generations and thus is an essential principle or precondition of sustainable development.

The potential effects on biological diversity must be taken into account when designing strategies for preventing pollution and assessing and controlling toxic substances.

The Committee recommends that biological diversity be incorporated in CEPA as a guiding principle. We recommend that the Preamble include a reference to Canada's international obligations in respect of the Convention on Biological Diversity, including its definition of biological diversity. The Act should define "biological diversity" as the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, among species and of ecosystems. We also recommend that the words "including associated biological diversity" be added to the reference to ecosystem integrity in the new definition of "environment" in CEPA.

RECOMMENDATION**6**

PRECAUTIONARY PRINCIPLE

The precautionary principle implies that, where an activity or substance poses a serious threat of harm to the environment or human health, precautionary measures will be taken even in the face of scientific uncertainty. The precautionary principle is fast becoming an important element of international environmental law, and is considered by many to be a key policy lever for promoting sustainable development. Commonly used expressions that capture the "idea" of the precautionary principle include "a stitch in time saves nine" and "an ounce of prevention is worth a pound of cure". The precautionary principle favours erring on the side of human health and environmental protection rather than on the side of short-term economic growth. Canadians are all too familiar with recent disasters, such as the loss of the Atlantic cod fishery, and have a clear understanding of what can happen when the precautionary principle is not applied.

Most witnesses were in favour of incorporating the precautionary principle as a guiding principle of CEPA. As in the case of other principles, some wanted to include

the precautionary principle only in the Preamble, while others preferred to incorporate it in the operational parts of the legislation.

The Canadian Bar Association recommended that the precautionary principle be incorporated in both the Preamble and the operational provisions of CEPA. It argued that Part II of the Act, particularly, could benefit from the precautionary approach:

The determination [of a toxic chemical] is arrived [at] through a classification process and the restriction of the release of that toxic chemical appears to be based on nothing short of scientific certainty. The same process is applied subsequently (substance by substance) for each and every other toxic chemical. Because this approach is proving too lengthy to attain its objectives within a reasonable time period, it does not fit with the notion of sustainable development. Instead, amendments should be made to Part II of CEPA that reflect a precautionary approach to managing toxic chemicals.¹⁸

The Chairman of the Canadian Section of the International Joint Commission informed the Committee that the IJC has adopted the “weight of evidence” approach to assess the toxicity of substances. This approach allows policy makers to accept and consider all available evidence and to make a decision based on that evidence, rather than wait for irrefutable, direct proof of damage, before it is too late:

This approach . . . means taking into account a variety of studies across a range of circumstances and, then, if there is a strong tendency or probability of linkages between the substance(s) and injury, taking action to stop the input of those substances to the environment without waiting for absolute proof that a specific chemical has caused injury to humans. It can be contrasted to, but also can subsume, the more demanding ‘cause-effect’ model which requires a rigorous proof of the specific cause or source of a pollution which is leading to a specific injury by a specific chemical, an approach that in the case of human health, may mean that human illness must necessarily precede action.¹⁹

Caution was expressed by some. Brunswick Mining and Smelting Corporation noted “safeguards are needed to ensure that the precautionary approach is not used as a cloak for inadequate science and is invoked only in appropriate circumstances”.²⁰ Likewise, the Canadian Manufacturers of Chemical Specialties Association remarked that “the precautionary principle should not be misinterpreted so that it becomes a short-cut to developing environmental policies where a better science base is required than we currently have”.²¹ They support the Rio Declaration definition — when there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

¹⁸ The Environmental Law Section, The Canadian Bar Association, Brief to the Committee, December 1994, p. 14.

¹⁹ Claude Lanthier, Chairman, Canadian Section of the International Joint Commission, Statement to the Committee, November 22, 1994, p. 10.

²⁰ Brunswick Mining and Smelting Corporation, Brief to the Committee, September 26, 1994, p. 3.

²¹ Canadian Manufacturers of Chemical Specialties Association, Brief to the Committee, September 27, 1994, p. 6.

David VanderZwaag, Director of the Marine and Environmental Law Program at Dalhousie University, pointed out that there is considerable uncertainty surrounding the precautionary principle, and added that it requires further discussion in national and international legal systems. "Debates continue over what should trigger the principle, with words such as 'likely harm' or 'serious or irreversible harm' being favoured verbal candidates. Who should 'pull the trigger' and make such determinations is open for discussion, as is the question of required precautionary control measures".²²

The Committee acknowledges that the concept of the precautionary principle is still evolving and requires further elaboration. At the same time, the Committee notes that the precautionary principle has been embraced with enthusiasm in a growing number of international environmental agreements. We have concluded, therefore, that it should be included as a guiding principle in CEPA. By doing so, Canada would be endorsing previous general commitments made in the 1990 Bergen Declaration and the 1992 Rio Declaration. The explicit incorporation of the precautionary principle in CEPA will be an important step forward in achieving sustainable development. The precautionary principle, moreover, is an essential element of pollution prevention.

The Committee believes that the most effective way to ensure that the precautionary principle influences the administration of the Act is to include an interpretive provision in CEPA stating that all parts of the Act shall be interpreted in accordance with the precautionary principle.

The Committee recommends that the precautionary principle be incorporated in CEPA as a guiding principle and that it be included in the Preamble. The Committee further recommends that an interpretive provision be included in the Act stating that all parts of CEPA shall be interpreted in accordance with the precautionary principle. CEPA should define the precautionary principle to mean that, in respect of all substances suspected of posing a serious threat to the environment or to human health on the basis of weight of evidence, lack of full scientific certainty shall not be sufficient reason for postponing preventive or remedial measures.

RECOMMENDATION**7**

USER/PRODUCER RESPONSIBILITY

As the concept of the precautionary principle has evolved, so too, has the concept of user/producer responsibility. (In some circles, this concept is also referred to as *reverse onus*.) This concept implies that those proposing a potentially harmful activity be required to prove that the activity *will not* be harmful, rather than requiring those protecting the environment to prove that the activity *will* be harmful.

Many witnesses referred to the concept of reverse onus (or user/producer responsibility) in discussions of the precautionary principle. Paul Muldoon of the

²² David VanderZwaag, CEPA and the Precautionary Principle/Approach, in Environment Canada, *Reviewing CEPA: The Issues #18*, 1994, p. 5.

Canadian Environmental Law Association noted, for example, that there are two facets to the precautionary principle:

One deals with onus. Those about to do something in or to the ecosystem ought to have the onus on ensuring that those activities are safe . . . The other . . . is how you discharge the onus. That is the weight or standard of evidence needed. (77:48)

According to the Canadian Environmental Network's Toxics Caucus:

The precautionary principle would suggest that the party proposing an activity, which may cause harm to the environment, bear the onus to establish that the activity is safe rather than have the government prove that it is harmful.²³

The Mohawk Council of Akwesasne stated:

. . . the onus of proof should always be on the activity to prove that it is not detrimental to the health and well-being of the environment. (50:16)

The Chairman of the Canadian Section of the International Joint Commission informed the Committee that the IJC has adopted (and urges everyone else to adopt) the principle of reverse onus, which means:

For all chemicals for which environmental or health effects are reasonably suspected on the basis of weight of evidence, the onus should be on the proponent or producer to demonstrate safety rather than on governments to prove harm, before it is used, produced or imported. The corollary of this policy for existing substances is a gradual phase out or sunseting of their use, production and importation.²⁴

Other witnesses used the term "reverse onus" more narrowly, and suggested the imposition of a reverse onus provision when there is an information gap, so that those interested in using or importing the substance must ensure all necessary information is available to make an assessment of its toxicity.

The Committee recognizes that the current provisions in CEPA regarding existing substances reinforce the view that all chemicals are innocent until proven otherwise. In the interim, Canadians and the environment are at risk. Chemicals may be used for long periods before their dangerous effects are known. We believe that another approach is required when dealing with potentially toxic substances. Some movement in this direction is already evident in CEPA. With respect to the introduction of new chemical substances in Canada, the Act now prohibits the import or manufacture of such substances until toxic screening and information requirements have been met. Although CEPA currently contains some provisions authorizing the government to

²³ Canadian Environmental Network's Toxics Caucus, The Canadian Environmental Protection Act: An Agenda for Reform, Brief to the Committee, November 1994, p. 3.

²⁴ Claude Lanthier, *op. cit.*, p. 110.

require information from importers and users of substances, the burden of proof is still on the government to establish that a specific substance is toxic. Providing such proof is especially difficult when there is little or no toxicological data or other information. In such cases, the government must then incur significant expense to obtain the required evidence.

The Committee recognizes that to prohibit all substances until they are deemed to be safe would, in effect, stop all industrial activity in Canada. Equally important, it would be just as unreasonable to demand that polluters demonstrate that a substance is absolutely harmless, as it would be to require governments to show absolute proof of toxicity. Building on the work of the International Joint Commission, the Committee proposes that CEPA be guided by the principle that, for all substances suspected of posing a serious threat to the environment or health on the basis of weight of evidence, the onus should be on the proponent or producer to demonstrate that the substance is safe rather than on a government or concerned citizens to prove that it is harmful, before it is used, produced or imported. This approach is consistent with the polluter-pays principle. Its adoption in CEPA would be another step toward achieving sustainable development.

Building on the work of the International Joint Commission, the Committee proposes that CEPA be guided by the principle that, for all substances suspected of posing a serious threat to the environment or health on the basis of weight of evidence, the onus should be on the proponent or producer to demonstrate that the substance is safe rather than on a government or concerned citizens to prove that it is harmful, before it is used, produced or imported.

The Committee also prefers the term “user/producer responsibility” to the term “reverse onus” for two reasons. First, the concept of reverse onus has a precise meaning in law that may lead to confusion in interpreting CEPA. Second, the term is not strong enough. “Reverse onus” implies an exception to a general rule. Thus, for CEPA, reverse onus would imply that the standard onus is on government to prove that a substance is unacceptable. We disagree with this. All provisions in CEPA should be based on the principle that users/producers must ensure that the substances they produce, use or sell do not pose an unacceptable risk to the environment or human health.

The Committee recommends that the concept of user/producer responsibility be incorporated in CEPA as a guiding principle. We also recommend that a statement be included in the Preamble indicating that particular attention be paid to the principle of user/producer responsibility when interpreting the provisions of the Act.

RECOMMENDATION
8

THE ASSESSMENT OF SUBSTANCES

INTRODUCTION

The assessment of risks posed by substances or chemicals¹ with toxic potential is a core mission of CEPA. Indeed, risk assessment is the pivotal point around which turn the functions of risk management — including scheduling, regulations, compliance, and enforcement. The Canadian public is very concerned with the possible effects of toxic substances on human health and the environment. The intensity of that concern does not appear to have diminished since CEPA was promulgated in 1988.

Canadians have been concerned for decades about the harmful effects of substances on human health. The focus of the most serious of these concerns has been on the carcinogenic, or cancer-causing, effects of chemicals. Recently, concerns have also been expressed about the possible harmful effects of substances on the reproductive and developmental integrity of human and other animal populations. Understandably, there is a feeling among the general public that most, if not all, industrial and commercial chemicals are inherently harmful to living creatures. Understandably, too, people want a solution for this problem and they look to government for protective legislation and rigorous enforcement of standards.

Under the existing provisions of CEPA, risk assessment is the process by which scientists determine the degree of risk posed to human or environmental health by a particular substance. Both the inherent toxicity and the amount of a substance that enters the environment are taken into account. Considered another way, this type of assessment can be, and is, used to determine the degree of “safeness” of a substance. This is not simply a semantic exercise. A “safeness assessment” is linked to the precautionary principle, and to the principle of user/producer responsibility, and would be a very important function in a renewed CEPA.

In most cases, a substance can be rendered essentially harmless to an organism if its concentration is reduced to a low enough level. It should be noted, however, that most substances are harmful or toxic to living systems if the exposure quantity or concentration levels are high. A significant number of substances, of course, are extremely toxic even at very low levels.

CEPA’s risk-assessment process has engendered extensive debate — to the point of becoming controversial. There is a broad body of opinion that the assessment process is

¹ The words “chemical” and “substance” will be used interchangeably in this chapter. CEPA, it will be noted, uses the word “substance”, rather than “chemical”, throughout its text.

complicated and cumbersome, and that it makes regulatory action unacceptably slow. Thus, CEPA is seen by some as merely nibbling away at the edges of a pervasive pollution problem that continues to grow apace.

A number of witnesses proposed hazard assessment as an alternative to risk assessment. Within this framework, the “intrinsic” or “inherent” toxicity of a substance is the principal factor considered in determining the need for regulation. The issue of how much of the substance enters the environment is not taken into account. The possibility that an inherently toxic substance *might* enter the environment is accepted as reason enough to trigger the regulatory process.

The hazard assessment approach is attractive because substances of alleged concern can be “captured” by the process without assessing actual or probable harm.

There is little doubt, even among those who administer the legislation, that there are problems with CEPA and the efficiency of its assessment procedures for toxic substances. The Committee is concerned with these problems and has devoted considerable time and energy to identifying ways in which the application of the Act might be improved.

Two principal and closely related issues form the framework of this chapter. One issue is the definition of “toxic”, because the term is used in different ways in the scientific community and in the legislation. CEPA’s current definition of “toxic” leads to the second major issue: to what extent should CEPA require reliance on a risk-assessment process as a pre-condition for the control of new and existing substances.

There is little doubt, even among those who administer the legislation, that there are problems with CEPA and the efficiency of its assessment procedures for toxic substances. The Committee is concerned with these problems and has devoted considerable time and energy to identifying ways in which the application of the Act might be improved.

RISK ASSESSMENT UNDER THE PRESENT DEFINITION OF TOXIC

The definition of “toxic” is contained in Part II, section 11 of CEPA, and reads as follows:

11. *For the purposes of this Part, a substance is toxic if it is entering or may enter the environment in a quantity or concentration or under conditions*
 - (a) *having or that may have an immediate or long-term harmful effect on the environment;*

- (b) *constituting or that may constitute a danger to the environment on which human life depends; or*
- (c) *constituting or that may constitute a danger in Canada to human life or health.*

This definition of toxic is consistent with a risk-assessment approach to pollution caused by chemical and other substances. This definition is also equated with risk because it links the inherent toxicity of a substance with the extent of exposure. Also, inclusion of the word “may” in the definition permits the assessment of *potential* risks to human and environmental health. This flexibility is compatible with the application of the precautionary principle.

For a substance to be classified as toxic under CEPA as it is currently written, there must be a possibility that the substance will *enter* the environment, that living organisms will be *exposed* to the substance, and that there will be an actual or probable *effect* resulting from that exposure. These three components of the definition of toxic are known as the “3 E’s of CEPA toxic”.²

In considering the acceptability of the definition of toxic under CEPA, it is appropriate to look briefly at the current environmental and human health risk assessment processes under the Act.

The first part of the current definition of toxic under CEPA focuses on entry of the substance into the Canadian environment — “a substance is toxic if it is entering or may enter the environment”. If the substance does not, or if there is a reasonable probability that it will not, enter the environment, then the conclusion would follow that it is “not toxic” under CEPA. If it does, or might, enter the environment, the current assessment practice requires that the major source(s) and release(s) of the substance be quantified. There are several established procedures for doing this.³ It is worth noting that information gathered in this phase of the assessment is useful for the development of control options in the event that a substance is ultimately declared to be toxic under CEPA.

The CEPA definition of toxic — “in a quantity or concentration or under conditions” — requires that an exposure assessment be carried out. Establishing and quantifying substance exposure to biota is a critical component of the current environmental risk assessment process under CEPA. Generally, this is more difficult to do than an entry assessment. The exposure assessment can often make use of measured concentrations of a substance in environmental media: air, soil, water, and/or sediment. There is often a considerable amount of data available in this category.

The third and final part of the environmental risk assessment process required to fulfil the operational definition of toxicity under CEPA is the effects assessment. The

² Environment Canada, *Guidelines for Conducting Environmental Assessments for Priority Substances Under the Canadian Environmental Protection Act*, Final Report, April 1992, p. 1.

³ *Ibid.*, p. 15-18.

purpose of an effects assessment is twofold: first, to determine acceptable concentrations for (natural) populations, communities and ecosystems exposed to the substance in Canada and, second, to establish whether the acceptable concentrations are exceeded by prevailing levels in the environment.⁴ Environment Canada's risk assessment guidelines define an acceptable concentration as "the maximum substance concentration that causes no immediate or long-term harmful effect to the (natural) population, community or ecosystem under consideration".⁵ The field study is the most useful type of study for an effects assessment, and one is carried out whenever feasible.

As noted above, the exposure and effects assessment criteria represent the principal differences between a risk assessment, as currently required under CEPA, and a hazard assessment.

The human health component of the toxicity definition is found in paragraphs (b) and (c) of section 11. Paragraph (b), in a sense, serves a "bridging" function in that it refers to "the environment on which human life depends". Paragraph (c) refers to substances "constituting or that may constitute a danger in Canada to human life or health". Human health risk assessment is the responsibility of Health Canada.

As is the case with the environmental portion of the assessment, the health assessment focuses on *exposure* and its *effects*. Health Canada makes as much use as possible of national surveys of ambient air, drinking water, soil, foodstuffs and consumer products within Canada to assess exposure of the general population to a particular substance. Human exposure may also be assessed by looking at concentrations of the substance in various human tissues or bodily fluids. The duration and frequency of exposure to substances are important parameters in the assessment.

The total daily intake of a substance, which places a number on the population exposure estimate, represents an *average* for the Canadian population. It is recognized, however, that exposures will vary from place to place in Canada and that some segments of the population will experience higher exposures than others. Wherever possible, these "high-exposure subgroups" are taken into account in the risk assessment.

The effects of human exposure to toxic substances are many and varied. They may be immediate or delayed, reversible or permanent, and brief or prolonged.⁶ In most cases, the effects are exposure-response or dose-response related; simply put, the greater the exposure, the more serious and more prevalent the effects are likely to be.

SUBSTANCES COVERED UNDER CEPA

The term "substance" is defined in section 3 of CEPA. The definition is very broad, and includes all kinds of organic and inorganic matter, and both animate (living) and

⁴ *Ibid.*, p. 30.

⁵ *Ibid.*, p. 31.

⁶ *Ibid.*, p. 8. The broad categories of human effects assessment include: organ-specific, neurological/behavioural, reproductive/developmental, immunological, carcinogenic, and mutagenic.

inanimate (non-living) material. For the purposes of the Act, the term “substance” also includes a class of “substances”.

CEPA covers substances that are not covered under other federal legislation.⁷ Excluded from CEPA, for example, are substances such as pesticides (which fall under the *Pest Control Products Act*, administered by Agriculture and Agri-Food Canada), foods and pharmaceutical drugs (*Food and Drugs Act*, administered by Health Canada), and those products regulated by Industry Canada under the *Hazardous Products Act*.

There are two broad categories of substances which fall under the purview of CEPA. First, there is the large category of *existing substances*. Approximately 28,000 existing substances are on the Domestic Substances List (DSL). Many have not been evaluated for their possible effects on human health and the environment.

The second broad category includes *new substances*, which are defined as substances new to Canadian society and commerce, and are therefore not part of the Domestic Substances List. CEPA requires that new substances undergo an assessment for their potential harmful effects on human and environmental health *prior to* their introduction to the Canadian market.

Existing Substances

The original Domestic Substances List (DSL) was published on January 26, 1991 as a supplement to the *Canada Gazette*; all additions to or deletions from the list are also published in the *Canada Gazette*. CEPA stipulates two criteria for inclusion on the DSL:

- (a) the substance was manufactured, imported or was in commercial use in Canada between January 1, 1984 and December 31, 1986 (CEPA, subsection 25(1)); or
- (b) the government has received all the information prescribed under section 26 of CEPA, and the import or manufacture has exceeded 1000 kg in any calendar year, or an accumulated total of 5000 kg. (CEPA, section 30)

The DSL includes a number of substances that pose a risk to the environment or to human health. The process by which such substances should be identified, assessed and controlled is a central issue in this Report.

At present, CEPA provides two mechanisms for assessing toxic substances. First, section 12 requires the Minister to establish a Priority Substances List (PSL). Substances included on the PSL are those “of which the Ministers are satisfied priority should be given in assessing whether they are toxic or capable of becoming toxic”. The first Priority Substances List (PSL1) contained 44 substances. The government is

⁷ Sub-section 34(3) of CEPA exempts substances that are “regulated by or under any other Act of Parliament”.

currently preparing a second Priority Substances List (PSL2) and anticipates that it will contain approximately 25 substances. Section 14 of CEPA effectively imposes a 5-year deadline for assessing each PSL substance by permitting the public to request a Board of Review if any PSL substance is not assessed within the 5-year period.

Twenty-five of the 44 substances on PSL1 were determined to be toxic under CEPA. Six substances were found not to be toxic under the Act. The government announced that there was insufficient information on which to base a decision for the remaining 13 substances. These 13 substances were subsequently removed from the PSL by the Minister of the Environment and the Minister of Health when it became apparent that the assessment could not be completed within the 5-year period (section 12 authorizes the Ministers to amend the PSL at any time).

The second mechanism for controlling existing problem substances is available under section 33 of CEPA, which stipulates that a substance need not go through a full PSL risk assessment if the Governor in Council is "satisfied" that the substance meets the definition of "toxic" in section 11 as described above. The government used this section, for example, to promulgate regulations for ozone-depleting substances (ODS).

During the course of public hearings, the Committee received extensive testimony that the PSL process was too slow. The view expressed was that the environmental and health risk-assessment procedures, which are central parts of the existing PSL process, are too protracted and demanding. The single-substance approach that dominates the PSL process was also seen by some as an impediment. The overall concern was that it will take much too long, and perhaps prove impossible, to deal with the large number of potentially toxic substances in our environment, if it continues to require five years to complete a risk assessment of fewer than 50 substances.

The Committee believes that ways must be found to expedite the assessment procedures under CEPA and to bring the authority of the Act to bear more effectively and efficiently on the problems of potentially toxic substances in the Canadian environment.

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In the following discussion we formulate a number of recommendations that bear on this issue.

The Definition Of Toxic Under CEPA

The definition of toxic under CEPA is a central point of the legislation. The designation of a substance as toxic is a prerequisite, or trigger, for the regulatory

process. As noted above, Part II now authorizes the regulation of a substance in two circumstances: (i) where the substance on the PSL has been declared toxic pursuant to a risk assessment (section 13), or (ii) where the Governor in Council is "satisfied" that the substance is toxic. (section 33).

Two important questions emerge in a consideration of the definition of "toxic" in section 11:

- Should CEPA continue to call for a risk assessment as currently required by the definition, or should the Act require only a hazard assessment?
- Should CEPA continue to use the word "toxic" to designate substances that have been assessed as harmful, whether by risk assessment or hazard assessment?

The definition of "toxic" under CEPA was thoroughly debated throughout the Committee's public hearings. Many witnesses felt that the definition imposes an unnecessarily stringent barrier to declaring a substance to be toxic under the Act, thereby reducing the effectiveness of the legislation.

CEPA is drafted (in such a way) that a finding of "toxicity" is a precondition before government action. The problem is that the threshold to meet the CEPA definition of toxicity is so high, that the statute is effectively thwarted in its scope and effectiveness.⁸

- Paul Muldoon

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The definition of "toxic" was also held, by some witnesses, to be at least partly responsible for the very long time it has taken to assess the substances on the first Priority Substances List (PSL). Many witnesses were very critical of the fact that only 44 substances were assessed during the first five years of the PSL process that most of the assessments were not completed until the last possible moment, and that even after five years not enough evidence was available to permit 13 of the substances to be assessed

⁸ Canadian Environmental Law Association, Incorporating Pollution Prevention into Part II of CEPA: An Agenda for Reform, Brief to the Committee, September 19, 1994, p. 7.

completely. The Environmental Law Section of the Canadian Bar Association made the following statement:

*The definition requires that for a substance to be found toxic, it must be emitted into the environment in a quantity or concentration causing harm to the environment and human health. In many cases, there is insufficient data to determine what quantities or concentrations are harmful. Under this system, in effect, chemicals are deemed not harmful and can be widely used until proven harmful. The definition of toxicity should be amended in a way which will help some of the evidentiary problems as well as the slow pace of progress in evaluation of these substances. Any definition should reflect both a preventative and a precautionary approach.*⁹

Other witnesses argued that the current definition is acceptable, principally because it *does* include a provision for risk-assessment. One industry witness stated that “Section 11 provides an acceptable definition of toxic and should not be amended”.¹⁰

The debate over the definition of “toxic” in section 11 is partly complicated by semantics, because the word itself is heavily value-laden and means different things to different people. A number of witnesses have noted that the CEPA definition is not in accord with the accepted scientific definition. In its publication dealing with CEPA and the Priority Substances process, Health Canada supports this view, stating:

*In scientific parlance, toxicity is the inherent capability of a substance to cause harm, which does not take into account exposure.*¹¹

The Committee accepts that the strict scientific definitions of toxic and toxicity are as stated by Health Canada, and as reiterated by several witnesses who appeared before us. The use of the word toxic in CEPA has given rise to a significant amount of confusion, and no small amount of consternation, in both the scientific and lay communities.

The issue, of course, goes beyond semantics and involves the operational approach of CEPA to a complex and important environmental and human-health issue. The mission of CEPA, as stated in the alternate title of the Act, is “the protection of the environment and of human life and health.” It is essential that there should be no misunderstanding or confusion about the meaning and intent of a critical part of the legislation.

The Committee has debated the issue at length, both with witnesses who appeared before us and during extensive *in camera* meetings. Most of the debate focused on two options. One option is to change the definition of toxic under CEPA so that the intrinsic hazard or toxicity of a substance would be the operative criterion for the designation.

⁹ The Environmental Law Section of The Canadian Bar Association, Brief to the Committee, December 1994, p. 23.

¹⁰ Brunswick Mining and Smelting Corporation Limited, *Submission to the Committee*, September 26, 1994, p. 7.

¹¹ Health Canada, *The Role of Human Health in CEPA*, Brief to the Committee, April 4, 1995, p. 2.

The second is to retain the risk assessment-based definition in section 11 and simply replace the word toxic because of the confusion its use has engendered.

The principal difference between a risk assessment and a hazard assessment is the *exposure* criterion. If the exposure criterion is removed, the regulatory process will have to rely on the “inherent hazard” or “inherent toxicity” of the substance under review, without regard to whether it is released, or may be released, into the environment in sufficient amounts, in the course of normal use to exert a deleterious effect.

Removing the exposure criterion from section 11 and using “inherent toxicity” as the criterion for a new schedule of toxic substances under CEPA could mean that as many as several hundred to a thousand or more, of approximately 28,000 substances now on the Domestic Substances List (DSL) may be classed as toxic. The actual number of substances determined to be “inherently toxic” will depend entirely on the criteria chosen to define toxicity.

Nonetheless, the Committee considers that an “inherent toxicity” approach has merit and could help to identify quickly the most harmful substances. We are concerned that some potentially dangerous substances are not being adequately addressed by the current risk assessment-based PSL system. Particularly, the current definition of toxic has contributed to two important problems, both of which could be addressed by moving in the direction of a hazard assessment. First, extensive amounts of data are required to conduct a full risk assessment. For some substances, these extensive data requirements may be extremely difficult to satisfy with the result that the PSL process may be fatally compromised. For 13 substances on the first PSL, the assessment process, unfortunately, could not be completed for this reason. Second, the Committee believes that, in some cases, such exhaustive information is not required in order to justify their regulation.

Nonetheless, the Committee considers that an “inherent toxicity” approach has merit and could help to identify quickly the most harmful substances. We are concerned that some potentially dangerous substances are not being adequately addressed by the current risk assessment-based PSL system.

We are aware that the adoption of an “inherently toxic” approach must be done with great care. It is the Committee’s belief, however, that selection criteria defining inherent toxicity can be established to identify and “capture” a modest, but significant, number of substances of environmental and health concern.

The Committee has not been given a clear definition of inherently toxic, but we believe that it is possible to establish objective toxicological criteria to identify a

manageable set of substances which pose potentially significant threats to environmental and human health. Detailed toxicological screening criteria for such substances are outlined in documents published in conjunction with the second Priority Substances List¹² and the Accelerated Reduction/Elimination of Toxics (ARET) program, for example.¹³

The Committee also wishes to ensure that a form of risk assessment process and the PSL system is maintained — despite the difficulties and concerns described above. We believe that there is a need for both approaches in dealing with toxic substances. Our overriding wish, however, is that a larger number of substances of concern should become subject to the regulatory process under CEPA.

For these reasons, we believe that section 11 of CEPA should be amended to provide for a determination of inherent toxicity and, in some cases, for a risk assessment process. Also, we believe that the word “toxic” should be retained in section 11 and in the body of the Act since the proposed definition provides that a substance may be designated toxic if it is “inherently toxic”.

Regulations made under the new definition section will define the criteria, or standards of assessment, to establish that a substance is toxic. The regulation will therefore state when a full risk assessment is required and when a hazard assessment will suffice. The standards of assessment for determining that a substance is inherently toxic must be set in such a way as to capture the “worst” substances.

The Committee recommends that section 11 of CEPA be amended to allow for the use of an inherent toxicity approach (as well as a risk-assessment approach) in determining whether a substance should be designated as toxic under the Act. For example, section 11 could be written as follows:

RECOMMENDATION
9

11.1. For the purposes of this Part, and subject to s. 11.2, a substance is toxic if it:

- a) has or may have an immediate or long-term harmful effect on the environment;
- b) constitutes or may constitute a danger to the environment on which human life depends; or
- c) constitutes or may constitute a danger in Canada to human life or health.

11.2. The Governor in Council shall promulgate regulations prescribing the standard of assessment to be followed to determine whether a substance:

¹² Environment Canada/Health Canada, Response to Stakeholders' Comments on the Federal Government Proposals for Preparing the Second Priority Substances List under the Canadian Environmental Protection Act (CEPA), May 1994, 17 pp.

¹³ *Environmental Leaders 1 — Voluntary Commitments to Action on Toxics through ARET*, March 1995, ARET Secretariat, Hull, Quebec, 64 pp.

- a) has or may have an immediate or long-term harmful effect on the environment;
- b) constitutes or may constitute a danger to the environment on which human life depends; or
- c) constitutes or may constitute a danger in Canada to human life or health.

Toxicity Assessment and the Precautionary Principle

A precautionary approach is implicit in the present definition of toxic through the use of the word “may” throughout the section. This permits considerable flexibility in the interpretation and application of the definition to achieve environmental protection.

In Chapter 4 of this Report, the Committee recommended that the precautionary principle be established as one of the guiding principles in CEPA. As we have noted, this principle is becoming a fundamental element in international environmental law and a policy lever for sustainable development. The definition of the precautionary principle that we have accepted is as follows:

For all substances suspected of posing serious threats to the environment or human health on the basis of weight of evidence, lack of full scientific certainty shall not be sufficient reason for postponing preventive or remedial measures.

The Committee has recommended including the precautionary principle in the Preamble of CEPA, and we have also recommended that an interpretive provision be included in CEPA so that all parts of the legislation shall be interpreted in accordance with the principle. This provision would therefore apply to the risk assessment process for substances in Part II. Having made this recommendation, it becomes necessary to effect a practical translation of the principle into a functional tool in CEPA.

The reference to the “lack of full scientific certainty” suggests that a significant body of relevant information must, nonetheless, exist before any decision pertaining to the toxicity of a substance is made. This is important, because some industry witnesses expressed concern that the principle might be abused in practice, as “a cloak for inadequate science”.¹⁴

The interpretation of scientific data to reach a conclusion in a risk assessment necessarily relies on the informed judgement of the scientists involved, combined with adherence to established evaluation standards. In addition to provisions requiring specific action in the face of uncertainty, applying the precautionary principle to risk assessment thus implies a shift in judgement towards a cautious approach to data

¹⁴ Brunswick Mining and Smelting Corporation Limited, Brief to the Committee, September 26, 1994, p. 3.

interpretation. What is not clear at this point is whether it will also require a change in the formal standards of evaluation currently applied by the government.

The Committee has noted the variety of opinions about the precautionary principle. Incorporating the principle into the operational parts of CEPA to ensure that it does not become simply a comfortable phrase without real meaning will take time. The Ministers of Environment and Health should appoint a working group composed of stakeholders of CEPA, together with officials of the two departments, to determine how the principle should be applied in the risk and hazard assessment processes.

The Committee recommends that the precautionary principle guide both the risk and hazard assessment of substances under CEPA. We further recommend that the Ministers of Environment and Health appoint a representative working group of stakeholders and departmental officials to make recommendations as to how the precautionary principle should be applied in CEPA's risk and hazard assessment processes for new and existing substances. The working group should be appointed within six months of the publication of the Committee's Report, and make recommendations to the Ministers within one year after its appointment.

RECOMMENDATION
10

Toxicity Assessment and the Ecosystem Approach

The incorporation of the ecosystem approach into CEPA was discussed at length by the Committee, including a roundtable discussion in Ottawa on March 2, 1995 with eight invited experts from a number of disciplines.¹⁵ Based on our various discussions the Committee has recommended that the ecosystem approach be adopted as a guiding principle of CEPA, and incorporated into the Preamble, Definitions and Part I of the Act. The Committee has also recommended that the definition of "environment" in section 3 of CEPA be amended to include "ecosystem integrity".

It was noted above that the environmental assessments that have been carried out under the current Priority Substances process made use of field studies wherever possible. It was also noted that Environment Canada's assessment guidelines define an "acceptable concentration" as "the maximum substance concentration that causes no immediate or long-term harmful effect to the (natural) population, community or *ecosystem* under consideration".¹⁶ [Emphasis added.] Thus, a type of ecosystem approach is already part of the current risk assessment process under CEPA.

The question to be considered here is how to ensure that an ecosystem approach is included in risk assessments under Part II of CEPA. The Committee believes that this could be done by an amendment to section 15 of CEPA respecting the "gathering of information" for an assessment.

¹⁵ House of Commons Standing Committee on Environment and Sustainable Development, *Minutes of Proceedings and Evidence*, Issue No. 77, Thursday, 2 March 1995, 52 p.

¹⁶ Environment Canada (1992), p. 31.

RECOMMENDATION**11**

The Committee recommends that section 15 of Part II of CEPA be amended to make explicit reference to the ecosystem approach in the risk assessment of substances under the Act.

Ecosystem Science

As we observed in Chapter 1, the Committee shares with a number of witnesses the view that science provides critical underpinning of much of environmental policy. Science helps inform the policy makers about which issues are most important, and it can help identify new, cost-effective solutions to those problems. The federal government is currently the largest supporter of environmental science in the country. The Committee strongly believes that the federal government should continue to play a leadership role in supporting environmental science. In particular, the Committee believes that federal support for environmental science should be focused increasingly on understanding ecosystem functioning and on developing risk-reduction strategies to support pollution prevention.

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RECOMMENDATION**12**

The Committee recommends that the federal government should continue to support environmental science, which should be focused increasingly on understanding ecosystem functioning and on developing risk-reduction strategies to support pollution prevention.

A Three-Track Approach to Assessing Toxic Substances

Substances differ in the type and severity of harm they might inflict on the environment and human health. It is appropriate that the legislation take a comprehensive and flexible approach in dealing with those threats. In the sections that follow, we describe, and make recommendations on, a number of approaches that we believe will broaden the application and enhance the performance of CEPA in achieving its central purpose.

Track 1: Assessments and Sunsetting of Substances

The sunseting of substances which possess particularly undesirable characteristics is an emerging tool in environmental protection. Sunseting essentially involves

eliminating a substance from production and use, and thus from the environment, over a period of years, where the period of the phase-out is determined by the time required to develop a replacement and the assessed risk of continued use of the substance. Sunsetting is discussed in greater detail in Chapter 6 of this Report.

As noted in Chapter 6, we believe that sunsetting should be made available as an option to address a number of toxic substances under CEPA. In addition, the Committee believes that CEPA should establish a *presumption* that a substance will be sunsetted in two specific circumstances: 1) where the substance has been sunsetted by a Canadian province or by another member country of the Organization for Economic Cooperation and Development (OECD) and 2) where the substance has certain prescribed hazard characteristics.

The principle of interprovincial and international co-operation in the management of toxic substances is an important component of a comprehensive approach to environmental protection. When a substance is banned or sunsetted in a jurisdiction, either in Canada or in a member nation of the OECD, we believe that substance should be phased out in Canada under CEPA.

The Committee recommends that CEPA be amended to deem a sunset of any substance on the Domestic Substances List that has been sunsetted or banned in any Canadian province, or in any member nation of the Organization for Economic Cooperation and Development.

RECOMMENDATION
13

The Committee agrees with the many witnesses who argued that there are some substances that should be sunsetted on the basis of their inherently hazardous characteristics. In other words, there are some substances whose inherent characteristics are such that a full risk assessment to determine uses and exposure patterns is not required.

The Committee agrees with the many witnesses who argued that there are some substances that should be sunsetted on the basis of their inherently hazardous characteristics. In other words, there are some substances whose inherent characteristics are such that a full risk assessment to determine uses and exposure patterns is not required.

The Committee believes that these characteristics should be prescribed by regulation. New scientific information and changing social values may warrant adding to or subtracting from the list of characteristics. Such changes can be made most easily by regulation, rather than through amendments to the legislation.

At a minimum, the Committee believes that the prescribed characteristics which will lead to a presumed sunset should include persistence¹⁷, bioaccumulative potential¹⁸ and inherent toxicity. Environment Canada, in its June 1995 Toxic Substances Management Policy¹⁹ stated that persistent, bioaccumulative, toxic substances that are predominantly anthropogenic will be placed on a track for "virtual elimination" from the Canadian environment.

The Committee regrets the launching of this policy on the eve of the presentation of CEPA's Statutory Report to the House. Indeed, the Committee's proposal for substances of this type differs from that of the Department in two important aspects. First, Environment Canada's proposed policy defines "toxic" as defined in CEPA, or as "equivalent" to CEPA's current definition. The Department will consider a substance to be "CEPA-toxic equivalent"

*... if it satisfies the (current) definition of "CEPA-toxic" as a result of a systematic, risk-based assessment. Such assessments can include determinations made under other federal statutes, or can incorporate appropriate elements of assessments done by or for provinces or territories, international organizations or other appropriate scientific authorities.*²⁰

The Committee does not believe that a full risk assessment is required in order to justify policies to eliminate persistent, bioaccumulative substances.

Rather, the Committee believes that Environment Canada and Health Canada should develop, in addition to strict threshold criteria for the persistence and bioaccumulation of substances, a third criterion for the *inherent toxicity* of substances which can then be used in conjunction with the first two to define those substances which should be tracked for virtual elimination through a sunset provision. The Committee's approach casts a wider net than does Environment Canada's new policy and gives the Departments greater latitude and flexibility in targeting substances for sunset under CEPA. These criteria should be promulgated in a regulation under the Act.

The second difference is that Environment Canada's Toxic Substances Management Policy permits proponents to use toxic, persistent, bioaccumulative substances only if they can demonstrate that the substance will not be released. The Committee takes a stricter approach: we wish to see the elimination of the *generation, use and release* of such substances.

¹⁷ *Persistence* is a term used for those chemicals which do not readily degrade, or break down, in the environment and remain in their original form for long periods. In some cases, the original substance does break down but a similarly toxic breakdown product (metabolite) persists in the environment.

¹⁸ *Bioaccumulation* refers to the capacity of a substance to accumulate in the tissues of an organism, possibly reaching toxic levels over time. Such substances are often, but not always, dissolved in fatty tissues. A very similar term is *bioconcentration*. A related term is *biomagnification*, a process whereby the accumulated tissue levels of a substance increase in various organisms at progressively higher stages of a food chain.

¹⁹ Government of Canada, Environment Canada, *Toxic Substances Management Policy*, June 1995.

²⁰ *Ibid*, p. 8.

The Committee does not have the technical capability to recommend specific criteria for persistence, bioaccumulation and inherent toxicity. The Committee is aware, however, that a number of efforts have been made, for example by the International Joint Commission (IJC), to identify such criteria. The Committee strongly supports the adoption of the most stringent criteria currently in use.

The Committee recommends that CEPA be amended to require that a regulation be promulgated under the Act defining threshold criteria for the properties of persistence and bioaccumulative potential for substances that come under the Act. The Committee further recommends that a criterion for “inherent toxicity” be developed for use in conjunction with the criteria of persistence and bioaccumulation, and included in the same regulation. These criteria should be based on the most stringent criteria currently in use.

RECOMMENDATION
14

The Committee further recommends that CEPA be amended to provide that any substance on the Domestic Substances List that meets or exceeds the prescribed regulatory criteria shall be deemed to be sunsetted under the Act.

RECOMMENDATION
15

The Committee recognizes that there are real economic and social costs associated with regulations that require the sunseting or banning of substances, just as there are similar and significant costs associated with inaction that leads to environmental damage. These costs should be addressed in two ways. First, the precise schedule for the sunseting should be established in conjunction with the stakeholders. (See Chapter 6 for additional discussion on this point.) Second, producers and users of substances that are candidates for a deemed sunset under CEPA should have an opportunity to appeal such a decision and demonstrate extraordinary reasons why the substance in question should not be sunsetted.

The Committee recommends that CEPA be amended to provide that, for those substances on the Domestic Substances List that are deemed to be sunsetted under CEPA for the reasons described above, the proponent shall be granted an opportunity to appeal to the Ministers of the Environment and Health and state extraordinary reasons why the substance in question should not be sunsetted under the Act, and should instead continue to be used for specific purposes.

RECOMMENDATION
16

Should the Ministers respond positively to a proponent’s appeal on sunseting, the substance should be used only on a circumscribed basis. Therefore, we recommend that, in such cases, the substance should be declared toxic under CEPA and subjected to strict regulation under the Act.

The Committee recommends that CEPA be amended to provide that, where a proponent’s appeal in respect of a substance deemed sunsetted under CEPA is accepted by the Ministers, the Ministers shall be authorized to declare the substance to be toxic under CEPA and subject to regulation under the Act.

RECOMMENDATION
17

Track 2: Regulation of Substances Regulated Elsewhere

Again, consistent with our desire to maximize the efficiency of action under CEPA, and to make use of foreign risk-assessment expertise and experience, the Committee

believes that CEPA should provide that, if a substance that falls under the purview of CEPA is regulated in a province of Canada or in a member nation of the OECD, the substance should be subject to similar regulation under CEPA, unless the proponent can demonstrate to the satisfaction of the Minister that there are extraordinary reasons why the substance should not be subject to regulation.

RECOMMENDATION
18

The Committee recommends that CEPA be amended to presume a toxic designation for any substance on the Domestic Substances List that is regulated in any Canadian province, or in any member nation of the Organization for Economic Cooperation and Development. The substance shall then be subject to regulation under CEPA unless the proponent can demonstrate to the satisfaction of the Ministers of the Environment and Health that there are extraordinary reasons why the substance should not be regulated.

Track 3: Priorities for Other DSL Substances

The third track proposed by the Committee for existing substances addresses the substances not presumed sunsetted or regulated under Tracks 1 or 2. The critical aspect of Track 3, therefore, is the choice of substances for assessment. This subject was discussed at length in the evaluation of CEPA released in December 1993.²¹ In particular, a number of witnesses argued that the PSL should include more complex mixtures and classes of substances, rather than focus on specific substances. The first Priority Substance List included 44 substances, most of which were single substances. There were some notable exceptions, including effluents from pulp mills using bleaching, inorganic fluorides, four metals (arsenic, cadmium, chromium and nickel) and their compounds, and mineral fibres, among others.²²

The assessment of single substances is a less onerous proposition than assessing complex mixtures. There is also a greater probability of reaching a defensible conclusion on the degree of risk or safeness posed by a single substance. However, a number of witnesses pointed out that the CEPA risk assessment process should include a larger selection of complex mixtures of substances, such as would be found in effluents and waste streams. Many of Canada's serious pollution problems are the result of the effects of such mixtures of pollutants.

Several witnesses also suggested that CEPA should consider the assessment of classes of substances.

Regulations are developed under CEPA on a substance-by-substance basis. Of the tens of thousands of substances that are in use in Canada, CEPA is only triggered by assessing each substance one at a time. This is the case even

²¹ Environment Canada, *Evaluation of the Canadian Environmental Protection Act (CEPA), Final Report*, Ottawa, December 1993, p. 25-46.

²² It was suggested also that the Accelerated Reduction/Elimination of Toxics program (ARET) should also devote more attention to mixtures and classes of substances.

*though substances could be grouped together because of similar characteristics or similar effects.*²³

Industry generally is not in favour of the assessment of classes of substances. We note, for example, that there has been a strong reaction of the mining and smelting industry to the published assessments of arsenic, cadmium, chromium and nickel and their compounds. In those assessments, industry representatives stated, substances of widely different toxicities were grouped together.²⁴ The current controversy over proposed sunseting of chlorine compounds, in essence the sunseting of an entire industry, has raised the stakes in this debate even higher.

Subject to the technical feasibility of such an approach, the Committee supports expanding the PSL to include complex mixtures and classes of substances. If it is indeed possible to assess effectively classes of substances for risks to health and the environment, the daunting challenge presented by the many manufactured polluting substances in the Canadian environment will be made significantly easier.

CEPA, as it is currently written, provides the necessary authority to change the emphasis of risk assessment more in the direction of classes of substances, effluents and waste streams, while continuing to assess single substances that are of concern. The challenge, then, is technical and political, not legislative. We recognize, however, that the availability of appropriate methodologies is an important factor in opting to select complex mixtures and classes of chemicals for assessment under CEPA.

The Committee recommends that the Minister of the Environment and the Minister of Health refocus their risk assessment efforts for Priority Substances more in the direction of classes of substances, effluents and waste streams, while continuing to assess single substances which are of concern.

RECOMMENDATION
19

The assessment of the first group of Priority Substances engendered a considerable amount of comment and criticism during the Committee's public hearings. In addition to the apparent delays in completing assessments, several witnesses were concerned with the fact that 13 of the 44 substances assessed were found to have "insufficient data for assessment" to determine whether they should be declared "toxic" or "non-toxic" under CEPA.

Since the completion of our public hearings, the Ministers have acted under section 12 of CEPA, which gives them the authority to amend the PSL at any time, and have removed the 13 substances from the PSL. This is not a satisfactory solution to this problem. (This issue is also discussed in Chapter 14.)

The status of "unproven" assessments of Priority Substances remains a difficult matter and must be resolved. In the opinion of the Committee, where it is apparent to

²³ Canadian Environmental Law Association, *Incorporating Pollution Prevention Into Part II of CEPA: An Agenda for Reform*, Brief to the Committee, September 19, 1994, p. 8-9.

²⁴ Brunswick Mining and Smelting Corporation Limited, Brief to the Committee, September 26, 1994, p. 7.

the government that it does not have adequate information to assess a substance, the appropriate solution would be to “stop the clock” on the formal assessment (which must be completed within a 5-year period) and require proponents to develop and submit the necessary information to complete the assessment. If no proponent is prepared, or able, to develop the necessary information to support the continued use of the substance in question, the Ministers should be empowered to declare the substance to be toxic and then control the substance.

RECOMMENDATION
20

The Committee recommends that CEPA be amended to provide a “stop clock” provision so that, in a case where there is insufficient information to complete the assessment of a Priority Substance, a) the Ministers of the Environment and Health can compel proponents of a substance to produce the required information and b) the statutory time limit for completing the assessment will not apply while the information is being collected. The Act should provide that, once the necessary information has been developed to complete the assessment, the “clock is restarted” and the assessment continues under the statutory time limit. The Committee further recommends that, where the necessary information is deemed unlikely to be forthcoming within one year, the Act should authorize the Ministers to declare the substance in question to be toxic under CEPA and to control the substance.

Several witnesses commented on the fact that, during the seven years that CEPA has been in effect, a designation of “toxic” under the Act has not necessarily meant that the substance is soon controlled under the Act. The Committee believes that the process of deciding how to control a substance should be subject to a precise time-line. After extensive discussion of the issue, we conclude that a two-year period is adequate time to decide how to control a substance after it has been designated toxic under CEPA.

RECOMMENDATION
21

The Committee recommends that, where a substance has been assessed and designated as toxic under CEPA, the government shall promulgate whatever control measures are appropriate for that substance within a period of two years after the date that said toxic designation was made.

NEW SUBSTANCES

The Current System for New Substances Under CEPA

A substantial number of new substances are brought onto the Canadian marketplace each year, principally because of advances in chemical technology. The federal government has a responsibility to control the introduction of new substances to ensure that they do not pose an unacceptable risk to the Canadian environment or to human health.

CEPA has adopted a preventive approach for the mitigation of the potential environmental and health effects of new substances, through the use of a pre-market

assessment process. CEPA's existing assessment process is triggered when Environment Canada receives a "new substance notification" prepared by the proponent who wishes to import or manufacture the substance. The assessment of the proponent's notification is carried out jointly with Health Canada and will result in one of the following:

- (a) a determination that the substance is not suspected of being toxic;
- (b) a suspicion that the substance is toxic, which may require: (i) controls on, or prohibition of, import and manufacture, or (ii) prohibition pending submission and assessment of additional information determined to be required by the Departments; or
- (c) limiting the purpose for which a substance may be used to permit the waiver of the information requirements prescribed by 26(4)(b) of CEPA.²⁵

As noted by the Canadian Institute for Environmental Law and Policy (CIELAP), the new substances provisions under CEPA give the departments the opportunity to assess and screen new substances for harmful properties prior to their commercialization and release into the Canadian environment.²⁶ A number of witnesses testified that it is appropriate to require that those wishing to produce or market new substances in Canada provide the necessary data to support their use. In essence, this means that new substances will be regarded as potentially harmful until a proponent presents evidence which indicates otherwise.

A number of witnesses testified that it is appropriate to require that those wishing to produce or market new substances in Canada provide the necessary data to support their use. In essence, this means that new substances will be regarded as potentially harmful until a proponent presents evidence which indicates otherwise.

The Committee agrees with this testimony and believes that it is consistent with the principle of user/producer responsibility and the precautionary principle in two ways. First, assessing substances before they appear on the market and in the environment puts a different cast on traditional risk assessment, turning it into a type of "safeness assessment". Substances that are found to have potentially harmful properties for the environment or health can have their production processes or use patterns controlled so as to avoid, or at least mitigate, future environmental and health problems. Second,

²⁵ Government of Canada, *Guidelines for the Notification and Testing of New Substances: Chemicals and Polymers, Pursuant to The New Substances Notification Regulations of the Canadian Environmental Protection Act*, Environment Canada/Health Canada, March 1993, p. 2.

²⁶ Canadian Institute for Environmental Law and Policy, *Reforming the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, Appendix 3, p. 5.

as with existing substances, the precautionary principle should inform the level of scientific certainty required in order to “prove” that a new substance will not pose an unacceptable risk.

RECOMMENDATION
22

The Committee recommends that the principle of user/producer responsibility be fully applied to new substances prior to their acceptance for use in Canada. Proponents of new substances shall be responsible for providing environmental and health data to support the use of their product(s) in Canada. New substances shall not be introduced into Canada until the proponent has demonstrated, in a manner consistent with the precautionary principle, that the substances do not pose an unacceptable risk to the environment or human health.

Section 26 of CEPA currently exempts from consideration in the course of an assessment of new substances, the potential health and environmental effects of a variety of “by-products”, including transient reaction intermediates; impurities, contaminants and partially unreacted chemicals; and various reaction products of the substance which appear during storage or after release of the substance into the environment. The Committee is concerned about the wisdom of these exceptions from assessment, cognizant as we are of the fact that toxic chlorinated dioxins and furans, now strictly regulated under CEPA, were contaminants of chemical products widely used in the pulp and paper industry. We believe that the new substances provisions in CEPA should cover by-products.

RECOMMENDATION
23

The Committee recommends that section 26 of CEPA, in respect of new substances, be amended to require the assessment of transient reaction intermediates; impurities, contaminants and partially unreacted chemicals; and various reaction products of new substances which appear during storage or after release into the environment.

Presumed Ban of Some New Substances Under CEPA

As with existing substances, there are some types of new substances which should not be accepted for the Canadian marketplace. For these products the Committee believes there should be a presumed, or deemed, ban. For example, the Committee believes that CEPA should presume a ban of new substances with certain inherent characteristics. The Committee believes that it would be appropriate to prescribe such characteristics by regulation. At a minimum, these prescribed characteristics should include persistence, bioaccumulative potential, and inherent toxicity, as was recommended above for existing substances. A second group of products which should be banned are those which have been banned in a Canadian province or in a member nation of the OECD.

As was the case with substances on the DSL which present similar concerns, the Committee believes that the proponent should have the opportunity to appeal any deemed ban of a new substance. Again, the proponent should only be able to overturn

the presumption of a ban by demonstrating extraordinary reasons to justify the introduction of the substance for a specific purpose. If the appeal is successful, and the Ministers of the Environment and Health agree that the substance may be produced or used for specific purposes, the new substance shall be declared toxic under CEPA and regulated accordingly.

The Committee recommends that CEPA be amended to require that all new substances be assessed for persistence and bioaccumulation and inherent toxicity using the criteria thresholds established by regulation under the Act.

**RECOMMENDATION
24**

The Committee recommends that CEPA be amended to provide that any new substance that meets or exceeds the established regulatory criteria for persistence, bioaccumulation, and inherent toxicity shall be deemed to be banned under the Act, unless the proponent can demonstrate to the satisfaction of the Ministers of the Environment and Health that there are extraordinary reasons justifying the introduction of the new substance for a specific purpose.

**RECOMMENDATION
25**

The Committee recommends that CEPA be amended to authorize the Ministers of the Environment and Health to declare a deemed ban of any new substance that is banned in any Canadian province, or in any member nation of the Organization for Economic Cooperation and Development, unless the proponent can demonstrate extraordinary reasons to the satisfaction of the Ministers that the new substance in question should not be banned.

**RECOMMENDATION
26**

The Committee recommends that CEPA be amended to provide that, where a proponent's appeal in respect of a new substance deemed banned under CEPA is accepted by the Ministers, the Ministers shall be authorized to declare the substance to be toxic under CEPA and subject to regulation under the Act.

**RECOMMENDATION
27**

Other New Substances

Although some new substances will be considered toxic under CEPA, most will not be banned under the above provisions. Those that are assessed as toxic should be admitted to Canada only where the proponent is able to demonstrate that there is an extraordinary reason to permit specific uses. Such specific uses will be subject to regulation and one or more of the controls discussed in Chapter 6. In respect of these substances, the Committee makes the following recommendation.

The Committee recommends that, where a new substance is declared to be toxic under CEPA, that new substance will be admitted into Canada only if the proponent can demonstrate to the Ministers of the Environment and Health that there are extraordinary reasons to permit specific uses. The Committee further recommends that, in every case where the Ministers agree to a specific use or uses, the new substance shall be admitted and control measures shall be promulgated under CEPA to define the conditions of the generation, use and release for that new substance.

**RECOMMENDATION
28**

CONTINUING INFORMATION REQUIREMENTS FOR SUBSTANCES UNDER CEPA

The decision-making process under CEPA relies on an uninterrupted flow of accurate information which is, in turn, essential to the continuing effort to protect the Canadian environment from potentially hazardous substances. CEPA already requires that a variety of information be supplied by proponents to support risk assessments under the Act. In addition, section 17 requires that a proponent who obtains information that “reasonably supports the conclusion that the substance is toxic or is capable of becoming toxic” must provide that information to the Minister. This provision must be strictly enforced.

New information is also important where the use or release of a substance changes over time. We have noted above, in connection with PSL assessments, that increased use of a substance may increase its entry into the environment and change the exposure pattern, perhaps toward a harmful effect. In this regard, the Committee believes that the principle of user/producer responsibility suggests that proponents should be required to provide information to the Minister on any significant new use of a substance in Canada.

RECOMMENDATION 29

The Committee recommends that CEPA should require proponents of existing substances to report to the Minister all significant new uses of those substances that come under the purview of the Act. The Committee further recommends strict enforcement of section 17 of CEPA, which requires that a proponent who obtains information that “reasonably supports the conclusion that the substance is toxic or capable of becoming toxic” must provide that information to the Minister.

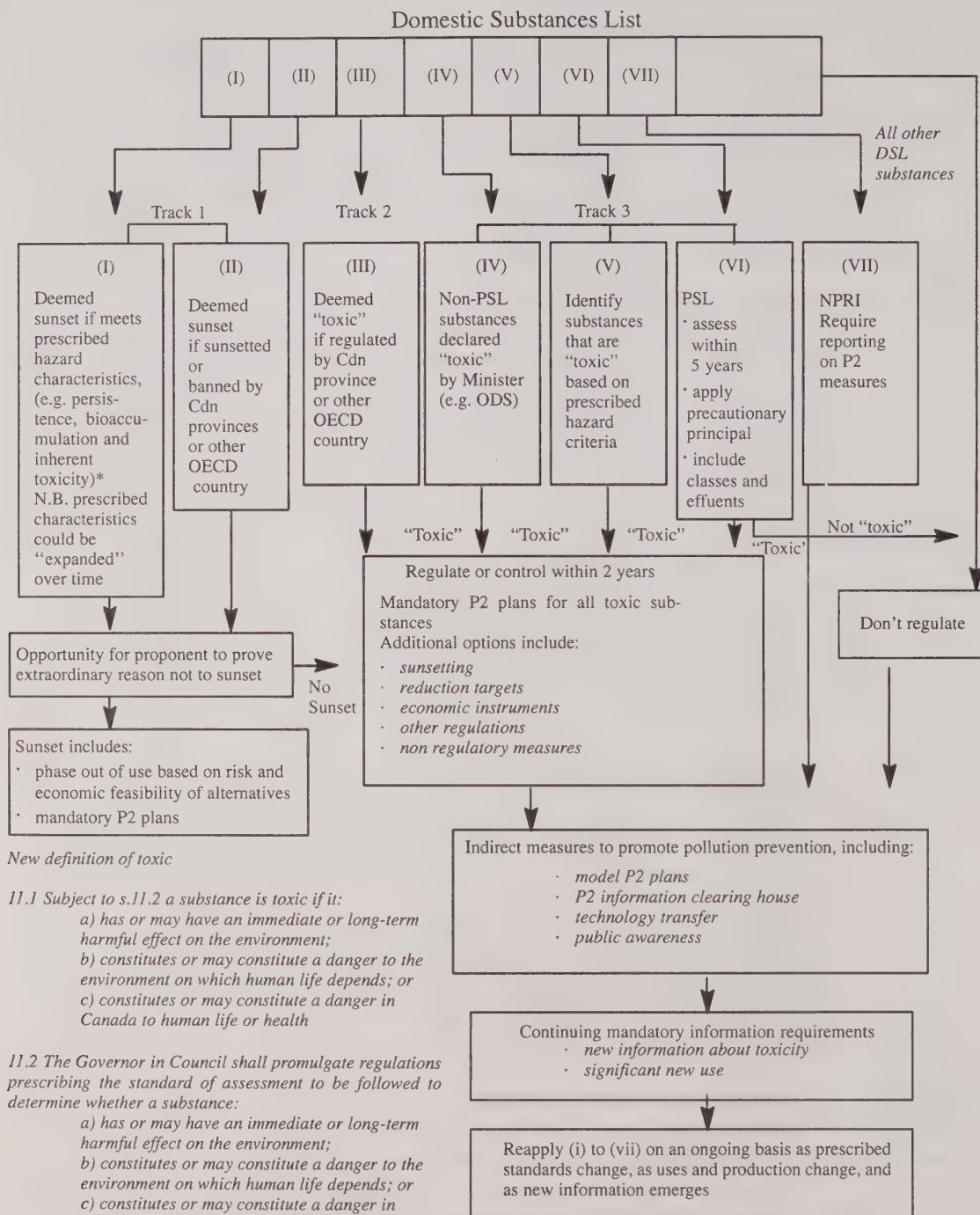
The Committee has a concern with respect to the process for assessing existing substances and the fact that six of the 44 substances, or groups of substances, whose assessment was completed under the first Priority Substances List were found to be “not toxic” under CEPA. The Committee is concerned that this assessment conclusion, although based on a detailed and scientific process, represents a “snapshot in time”.

Although such conclusions may be valid at the time they are reached, the uses and/or releases of the substances might change over time. The assessment process attempts to look into future exposure patterns for substances, but there is no system in place to monitor and report on changes that might occur in patterns of exposure. We believe that such a system should be developed.

RECOMMENDATION 30

The Committee recommends that, where a substance has been assessed as “not toxic”, Environment Canada and Health Canada shall, in cooperation with proponents and stakeholders, develop a system requiring proponents of the substance to provide pertinent information on any significant changes in the *exposure pattern* of that substance to an extent that might require a re-assessment of its “not considered toxic” designation under the Act.

Schematic of the Proposed Process for Existing Substances



PREVENTING TOXIC SUBSTANCES POLLUTION

As noted throughout this Report, the Committee believes that pollution prevention should be the priority approach to environmental protection. In addition, the Committee firmly believes that CEPA should provide a key legislative base for promoting pollution prevention in Canada. As has already been stated, a major shift in emphasis is required in the legislation, from managing pollution after it has been created to preventing pollution in the first place. We believe that pollution prevention will avoid, eliminate and reduce more pollution than “react and cure” strategies and that it will do so more cost-effectively. To this end, we contend that emphasis should be placed on a variety of pollution prevention strategies and tools that encourage more decisions to be made at the point of manufacture or use. Such strategies and tools contribute to the efficient use and conservation of natural resources, material and feedstock substitution, product reformulation, and the adoption of clean production methods and practices.

The Committee also acknowledges that the transition to clean production and practices will inevitably be an ongoing process. There will be situations where control and remediation will remain the best available options. Nonetheless, we reiterate the need to emphasize preventive measures and to phase out pollution control methods. Pollution-control strategies should be considered only as interim measures until pollution-prevention strategies are put in place.

CEPA can promote the desired shift to preventing pollution in two ways. First, CEPA can require or authorize a number of specific strategies to prevent pollution by substances declared or deemed toxic under the Act. Such strategies are mandatory pollution-prevention plans, economic instruments, regulations, non-regulatory measures, sunseting, reduction targets, and reporting requirements on pollution prevention goals and targets. Second, various strategies can be incorporated in Part I of the Act authorizing the federal government to promote and facilitate voluntary adoption of pollution prevention throughout Canada. Such measures include model pollution-prevention planning guidelines, technology development and transfer, a national pollution-prevention information clearinghouse, awards and public awareness programs.

MANAGING SUBSTANCES DECLARED OR DEEMED TOXIC UNDER CEPA

At present, the government typically relies on “command and control” regulatory strategies to manage substances declared toxic under CEPA. Consistent with the principle of pollution prevention, the Committee believes that CEPA should provide

more options for managing toxic substances — particularly options that encourage environmental decisions to be made at the point of manufacture or use and that contribute to the adoption of pollution prevention practices. This does not imply that there is no need for command and control regulations. Command and control authority will continue to play an important role within CEPA, particularly when immediate action is called for to protect the environment and human health from serious threats.

Mandatory Pollution Prevention Plans

One strategy for promoting pollution prevention is to require manufacturers to prepare pollution-prevention plans for facilities. In an industrial context, pollution prevention planning involves a comprehensive examination of an industrial facility for the purpose of avoiding, eliminating or reducing pollution. The resulting plan may also encompass the successive stages in the life cycle of a product. In the past, some corporate planning activities have indirectly promoted pollution prevention planning. Deliberate planning efforts, aimed specifically at pollution prevention, however, are a relatively recent and limited phenomena.

A cross-section of witnesses proposed amendments to Part II of CEPA requiring producers and users of substances deemed toxic under CEPA to produce pollution prevention plans. The Canadian Bar Association recommended that “section 34(1) of CEPA be amended to allow the federal government to pass regulations requiring mandatory pollution prevention plans for toxic substances, where appropriate”.¹ Similarly, the Canadian Environmental Law Association recommended that CEPA require pollution prevention plans from producers and users who generate or use designated substances. The Canadian Chemical Producers’ Association, meanwhile, took the position that, “to provide for greater certainty we support amending this section to ensure that such regulations can be issued for listed toxic substances”.²

Witnesses also pointed out that CEPA should be modified with respect to the matter of moving hazardous wastes across international boundaries, arguing that CEPA should require hazardous waste reduction plans from exporters. Several suggested that while CEPA regulates the import and export of such wastes, it does little to minimize their production. The focus, it was argued, should be on reducing the production of wastes and on protecting the environment; that is, the orientation of the Act should be toward pollution prevention rather than toward pollution control. The Saskatchewan Environmental Society and the Canadian Environment Network’s (CEN) Toxics Caucus recommended that CEPA be revised to require waste exporters to have plans for phasing out the production of hazardous waste.

The Committee views pollution prevention planning as an essential component of a pollution prevention framework. We note that pollution prevention planning is having

¹ The Environmental Law Section of The Canadian Bar Association, Brief to the Committee, December 1994, p. 29.

² The Canadian Chemical Producers’ Association, Brief to the Committee, September 1994, p. 30.

a positive effect on environmental performance, particularly at the plant level in Ontario and in the United States. The Committee sees pollution prevention planning as an environmental management tool to identify pollution prevention opportunities and to analyze their technical and economic feasibility. Such planning would require firms to consider both environmental-protection issues and production issues in developing a compliance strategy. This could also enable firms to exercise more of their own initiative in coordinating different regulations that affect the same plant, and thereby reduce transaction costs, minimize cross-media transfers of pollutants and waste, and provide a clearer sense of long-term goals for the regulated facility. Ideally, such provisions should also lead the environmental-protection and production units within the firm to work together more closely — influencing each others' activities and developing an overall organizational consensus to identify targets and strategies. Indeed, such co-operation at the firm level is a key ingredient of a pollution prevention plan.

The Committee agrees with the witnesses who recommended that pollution-prevention planning be mandatory for producers and users of substances declared toxic under CEPA, and for substances declared to be subject to a deemed sunset. The Committee also agrees that CEPA should require waste exporters to have plans for phasing-out the production of hazardous waste being exported.

We acknowledge that the federal government will have to identify the parties to whom the requirement to produce pollution-prevention plans should apply. Presumably, this requirement will apply to manufacturers but not to consumers who use a product for household or office purposes. The government will have to decide where to draw the line between these two obvious extremes.

The Committee also acknowledges that the federal government will have to determine the nature of such plans and what precisely CEPA should require. We note, however, that the process of pollution-prevention planning is maturing, and that a number of common elements have been identified.³ Ideally, pollution-prevention plans should be comprehensive and require firms to chart the flow of chemicals through each production unit; assess the cost of existing control method(s) for each production unit; evaluate the technical feasibility and cost-effectiveness of the pollution-prevention options; and indicate how progress toward reduction targets will be tracked.

The Committee notes that legislated requirements tend to clarify what is expected of industry, generally, and apply equally to all targeted industries, not only to those inclined to adopt pollution-prevention planning. The environmental objective for requiring pollution-prevention planning is to overcome the inertia of decades of

³ For example, the Government of Ontario has developed *Pollution Prevention Planning: Guidance Document and Workbook* for pollution-prevention planning, and the Canadian Standards Association has developed *Guideline for Pollution Prevention*.

performance based on pollution-control standards and to realign management practices to conform with a pollution prevention perspective.

The Committee recognizes that there will be transaction costs, including administrative costs, associated with legislated pollution-prevention plans to educate targeted sectors and to assist in the development, implementation, monitoring and updating of such plans. We believe, however, that, if properly designed and delivered, the initial regulatory push to mandate pollution-prevention planning should require minimal follow-up by government because the benefits of the planning process will become self-evident. In short, pollution-prevention planning should become a self-sustaining business practice rather than a regulatory burden on industry or an enforcement burden on governments.

The Committee recommends that CEPA require producers and users of substances declared or deemed toxic under CEPA, including substances subject to sunseting, to produce pollution prevention plans.

**RECOMMENDATION
31**

The Committee recommends that CEPA require waste exporters to have plans for phasing-out the production of the hazardous waste being exported.

**RECOMMENDATION
32**

Economic Instruments

There is a growing interest in alternative means to protect the environment — away from command and control methods. In this context, economic instruments, such as taxes on environmentally harmful products or activities, and the creation of markets for trading of permits to emit pollutants, are attracting growing interest. Economic instruments are market-based tools. They have the potential to change behaviour by providing monetary incentives to reduce and/or eliminate the production and discharge of toxic substances.

In *Creating Opportunity*, the Liberal Party committed itself to the use of economic instruments for environmental protection as a complement to the traditional regulatory practice, where these offer the lowest cost and most flexible methods to achieve environmental goals.

In *Creating Opportunity*, the Liberal Party committed itself to the use of economic instruments for environmental protection as a complement to the traditional regulatory practice, where these offer the lowest cost and most flexible methods to achieve environmental goals.

Although it does not preclude their use, CEPA, in its present form, contains no provision explicitly authorizing the use of economic instruments to prevent pollution

from toxic substances. There was a broad consensus that CEPA should authorize the use of economic instruments.

The Environmental Law Section of the Canadian Bar Association recommended that “the present command and control mechanisms be retained and be supplemented by the use of economic instruments, where appropriate, to promote environmental compliance under CEPA”.⁴ Similarly, William Rees, Director of the School of Community and Regional Planning at the University of British Columbia, noted that:

...if it's just command and control regulation, it's not going to be nearly as effective or efficient as some of the alternatives, including marketable resource quotas, depletion quotas of one kind or another, resource depletion taxes, pollution taxes, tradeable pollution rights and so on . . . (63:58)

The Mining Association of Canada also suggested that CEPA explicitly authorize the use of economic instruments, noting that “carefully designed economic instruments can also spur improved performance more efficiently than regulation”.⁵

The Canadian Environmental Network's Toxics Caucus argued that any CEPA provisions related to economic instruments be tied to specific purposes in the Act, rather than provide a general authorization for economic instruments. In particular, it opposed amending CEPA to authorize trading of permits for ocean dumping or for emissions of toxic substances. Their concerns stem from the potential degradation of local environments and the administrative, monitoring and enforcement difficulties involved in implementing an environmentally acceptable trading system. The Caucus did agree, however, that charges on the use, processing, manufacturing, sale, import or export of a toxic substance or a product containing a toxic substance can play a role in promoting pollution prevention through the reduction and elimination of the use and manufacture of toxic substances.

Several witnesses also recommended that revenues obtained from economic instruments under CEPA be applied to government environmental programs or to an environmental fund.

The Committee recognizes that command and control tools will continue to play an important role within the Act, particularly when immediate action is called for. But, we recognize that there are other instances when such tools provide limited flexibility in securing compliance with the law in an economically-efficient and environmentally-effective way.

The Committee notes that a number of important advantages can be gained through the use of economic instruments to promote ecosystem health and sustainable development. In some cases, theory (and some experience in other jurisdictions)

⁴ The Environmental Law Section of The Canadian Bar Association, Brief to the Committee, December 1994, p. 32.

⁵ The Mining Association of Canada, Brief to the Committee, September 28, 1994, p. 7.

suggests that, if properly designed and implemented, economic instruments should provide industry with the flexibility to adopt least-cost solutions to achieve a required environmental standard. Economic instruments can also create ongoing incentives both to exceed legal requirements and to develop and adopt cleaner and more efficient production technologies and processes. Economic-based solutions tend to be fast-acting. The adoption of energy-efficient production processes following the oil-price shocks of the 1970s is an example of rapid market-based response. Economic factors are also an important initiator of technological change.

The Committee agrees with the many witnesses who argued that the Act should include a general authorization for the use of economic instruments for environmental protection. We acknowledge the concerns expressed by some witnesses. Given that Canada has little experience with economic instruments, however, we should not preclude their use. Instead, the Committee suggests that CEPA authorize use of the full range of economic instruments, while recognizing that not all will be appropriate in every circumstance.

The Committee notes that a number of important initiatives have recently raised awareness of and increased support for the use of economic instruments. The Committee believes that such initiatives have established the necessary groundwork for the introduction of certain economic instruments. In particular, the Committee commends the government for sponsoring the Task Force on Economic Instruments and Disincentives in the autumn of 1994, and urges the government to implement the recommendations in the Task Force Final Report. The Committee also notes, however, that the Task Force concluded by stating that “the scope of the issue of existing barriers and disincentives and the potential for economic instruments far exceeds the contribution made by this report... (and) it is very important for the government to adopt its recommendations for the examination of longer term measures”.⁶

The Committee agrees that more work is required on the issue of removing fiscal and other barriers and disincentives to environmentally sound practice and implementing correspondingly positive economic incentives to prevent pollution, conserve resources and promote sustainability. Accordingly, the Committee strongly urges the federal government to continue the important work begun by the Task Force to ensure that barriers are eliminated and appropriate economic instruments are implemented.

Finally, the Committee recommends that funds generated from fines and charges authorized under CEPA be applied to the “environmental fund” which the Committee, later in this Report, recommends establishing for funding environmental promotion activities and intervenor funding (see Chapter 14).

The Committee recommends that CEPA be amended to provide broad enabling authority for the use of economic instruments.

RECOMMENDATION**33**

⁶ The Task Force on Economic Instruments and Disincentives to Sound Environmental Practices, *Final Report*, Nov. 1994, p. 39.

RECOMMENDATION

34

The Committee recommends that the government implement the recommendations in the Final Report of The Task Force on Economic Instruments and Disincentives to Environmentally Sound Practice, and continue the important work begun by the Task Force to ensure that barriers are eliminated and appropriate economic instruments are implemented.

RECOMMENDATION

35

The Committee recommends that funds generated from fines and charges authorized under CEPA be directed to the environmental fund recommended in Chapter 14.

Non-Regulatory Measures

There is also a growing interest in using voluntary and negotiated means to implement environmental protection. Voluntary measures can take many forms.

Such measures can include an arrangement whereby an industrial sector or an individual corporation voluntarily undertakes a self-regulated program to reduce or eliminate pollution. The means of reduction can vary considerably within and between sectors or individual firms, and may include such methods as product reformulation, process modification, equipment redesign and resource recovery. The Responsible Care Program developed by the Canadian Chemical Producers' Association is one example of an industrial sector initiative that encourages members to reduce pollution voluntarily.

Negotiated initiatives are similar to voluntary approaches, except that the methodology and goals of the program are developed in partnership with one or more levels of government and, in some cases, other non-governmental organizations. The Memorandum of Understanding (MOU) signed by Environment Canada, the Ontario Ministry of Environment and Energy, and the Motor Vehicle Manufacturers' Association (MVMA) is an illustration of a voluntary, negotiated effort to prevent pollution. Among other things, the MOU requires the MVMA to produce and implement pollution prevention plans, monitor progress and verify reductions.

Covenants are voluntary agreements negotiated by several parties who have a shared interest in the undertaking — usually different levels of government and industry representatives. Covenants have the status of binding contracts in civil law. The general format of a covenant is made up of contractual elements. The agreement defines what is to be done, what standards must be met, and what happens if the commitments or standards are not met. The use of a covenant as a policy instrument for environmental management is still in its infancy. In the Netherlands, however, covenants are being used as the means to determine how specific sectors will comply with the overarching environmental objectives established by the national government. Most pertain to permitting and licensing practices.

Challenge targets establish numerical pollution-reduction standards that everyone in a particular sector is encouraged to meet. The Accelerated Reduction/Elimination of

Toxics (ARET) is an example of a multi-stakeholder group using consensus to identify specific substances of concern and emission reduction targets, and challenging companies to respond with action plans.

Many witnesses were very supportive of using non-regulatory measures to prevent and control pollution by substances declared or deemed to be toxic under CEPA. The Canadian Manufacturers of Chemical Specialties Association argued that non-regulatory measures are the way of the future, pointing out that they enhance competitiveness and save the taxpayer money. The Association urged that consideration be given to a professional self-regulatory model, with codes of ethics. The Association conceded, however, that regulations will still be needed to deal with those who do not adhere to voluntary measures.

The Canadian Chemical Producers' Association argued that voluntary initiatives are generally the most flexible and cost-efficient way to achieve environmental-improvement objectives because they maximize industry's freedom to decide how best "to get the job done":

CCPA is not arguing that CEPA's regulation-making power should be emasculated so that we rely indiscriminately on non-regulatory approaches for achieving environmental improvement. Our point is that laws and regulations should not be the initial approach to achieve environmental improvement, but should be used only if voluntary initiatives do not meet society's expectations.⁷

The Mining Association of Canada argued that effective and efficient risk management requires a wide range of instruments, each selected for its appropriateness, on a case-by-case basis:

In addition to traditional regulation, CEPA should explicitly permit the use of other approaches such as voluntary action, economic instruments, and contracts. Voluntary action can achieve faster environmental results at lower cost and with less administrative burden . . . Contractual arrangements can be used to meet multi-stakeholder requirements in complex, unique situations.⁸

The Environmental Law Section of the Canadian Bar Association (CBA), meanwhile, was of the view that the federal government should support voluntary pollution-prevention initiatives where business sets its own pollution reduction strategies, as a complement to government regulations that establish minimum standards. The Association noted that additional weight could be given to voluntary standards set by bodies such as the Canadian Standards Association. The CBA witness observed that it might be appropriate, for example, for CEPA to recognize compliance with such standards as a minimum for establishing a "due diligence" defence. The CBA also recommended that the federal government encourage voluntary pollution-

⁷ Canadian Chemical Producers' Association, Brief to the Committee, September 1994, p. 14.

⁸ The Mining Association of Canada, Brief to the Committee, September 28, 1994, p. 7

prevention practices through support of the national pollution prevention offices and coordination with provincial and regional pollution-prevention offices.

Other witnesses were opposed to the rising trends toward deregulation and voluntary action as means of achieving environmental protection. The Learning Disabilities Association of Canada expressed their concern that Canada is "... relying more and more on voluntary codes of practice and voluntary standards" and sees this as a negative development. (45:46) Ms. Novaczek of the Environmental Coalition of PEI was even more vocal, noting that in trying to decide how to manage toxic substances, we are "dithering around about what voluntary mechanisms we can devise to allow industry to continue to produce and to dump these substances for a number of years to come". (56:7)

In its appearance before the Committee, KPMG Environmental Services reported on the results of its *1994 Canadian Environmental Management Survey*. The survey concluded that for 95 percent of respondents, compliance with regulations was the primary motivating factor for introducing environmentally beneficial changes. Only 16 percent of respondents considered voluntary government programs to be a principal motivator — putting such programs near the bottom of the priority list. It also worth noting that the survey concluded that of the 69 percent of respondents who stated that they had a management system in place to deal with environmental matters, only 2.5 percent could claim to have incorporated all the key components outlined in the British Standards Institute's BS 7750, the world's leading standard for environmental management systems.

In its appearance before the Committee, KPMG Environmental Services reported on the results of its *1994 Canadian Environmental Management Survey*. The survey concluded that for 95 percent of respondents, compliance with regulations was the primary motivating factor for introducing environmentally beneficial changes. Only 16 percent of respondents considered voluntary government programs to be a principal motivator — putting such programs near the bottom of the priority list.

The Ontario Chapter of the Canadian Environment Industry Association, noted in its appearance before the Committee that domestic growth in the environment industry has been "slowed to a crawl" in the last several years, coinciding with the introduction by the previous government of several non-regulatory approaches. The witness pointed to the Accelerated Reduction/Elimination of Toxics (ARET) initiative, noting his concerns that participation in ARET has been spotty, that ARET only covers a limited number of contaminants, and that there is no clear indication as to how members will be held accountable for non-compliance. He went on to argue that performance-based

regulations stimulate technological innovation and promote a strong environmental industries sector.

The Association witness added that it is a misconception that command-and-control regulations are expensive and that voluntary initiatives are not; voluntary pollution prevention initiatives are often accompanied by costly funding support programs:

Voluntary initiatives involve a tremendous amount of executive time in meeting and negotiating targets and timetables, and ways to achieve them. More time and resources can be spent encouraging full cooperation and compliance with a voluntary program than with implementing a clean set of performance-based regulation. Ironically, for the voluntary approach, after going through all the effort and expense, regulations may be needed anyway.⁹

The Committee recognizes that there are many documented industry and business initiatives that rely on voluntary pollution prevention strategies. We welcome and support such initiatives. *Nevertheless, the Committee is of the opinion that voluntary initiatives cannot replace regulatory mechanisms.* The Committee is particularly opposed to the notion of compliance agreements that exempt parties to private contracts from specific regulations.

... the Committee is of the opinion that voluntary initiatives cannot replace regulatory mechanisms.

The Committee is also concerned about the administrative burden that may be placed on the federal government with respect to the negotiation and implementation of non-regulatory measures. Specifically, we are concerned about the potential costs associated with the negotiation and monitoring of separate agreements with every affected party. In our view it is preferable to promulgate and enforce a single regulation.

Nonetheless, the Committee believes voluntary initiatives have an important role to play in the range of options for achieving pollution prevention. We do not advocate going back to the predominantly command-and-control-regulation regime as the sole means to manage toxic substances. We do, however, believe much more work has yet to be done in the area of non-regulatory measures.

At present, the federal government knows little about non-regulatory measures and needs considerably more information about how to design them, when to use them, and

⁹ Canadian Environment Industry Association, Ontario Chapter, Brief to the Committee, May 8, 1995, p. 3.

what institutional support they require. One of the most important issues with respect to non-regulatory measures has to do with what accountability mechanisms may be required. Accountability mechanisms for non-regulatory measures may require a quite different institutional framework from that with which the federal government is now familiar. The Committee did not receive any adequate answers to these questions in its deliberations.

The Committee recommends that:

RECOMMENDATION

36

- a) **in the context of managing substances declared or deemed to be toxic under CEPA, non-regulatory measures be used strictly as a supplement to, and not as a replacement for, regulations or economic instruments;**
- b) **the federal government continue to encourage voluntary initiatives, such as the Canadian Chemical Producers' Association's Responsible Care Program, to promote pollution prevention; and**
- c) **the federal government continue to explore and study the use of non-regulatory measures and, in particular, to learn more about when and how to use them and what accountability mechanisms are required to ensure that they effectively prevent the generation, use and release of toxic substances.**

Targeting Chemicals

Another pollution prevention strategy to manage risk is to target specific chemicals or pollutants for bans, phase-outs, sunseting, or reduction targets. The rationale for targeting is that certain chemicals pose such a serious risk to society that they should not be used at all. As noted in the previous chapter, for example, persistent, bioaccumulative chemicals are especially difficult to manage. Such substances cause long-term problems that are extremely costly and sometimes virtually impossible to correct.

The critical differences between bans, phase-outs and sunsets are succinctly summarized in Pollution Probe's *Toxic Chemical Sunsets: An Emerging Chemical Restriction Policy*. A *ban* prohibits some or all uses of a individual toxic chemical, but does not allow a transition period for the development of safer substitutes; a *phase-out* bans a toxic chemical or chemicals over a period of time to allow for the development of safer substitutes; a *sunset* implements a systematic process that identifies and phases out chemicals with certain characteristics. At its simplest, sunseting is a process for phasing out toxic substances with certain characteristics and phasing in low risk alternatives — the ultimate goal being to ban the unsafe substances altogether. Reduction targets simply identify reduction levels for specific substances, usually within a given time frame.

The notion that toxic substances with certain characteristics should be phased out or sunsetted over time is gaining popularity in Canada. The International Joint

Commission, for example, endorsed the sunset chemical approach in its *Sixth Biennial Report on Great Lakes Water Quality* (1992) and confirmed its view in its *Seventh Biennial Report* (1993).

... a comprehensive process to restrict, phase out and eventually ban the manufacture, generation, use, transport, storage, discharge and disposal of a persistent toxic substance. Sunseting may require consideration of the manufacturing processes and products associated with a chemical's production and use, as well as of the chemical itself, and realistic yet finite timeframes to achieve the virtual elimination of the persistent toxic substances.¹⁰

In its submission to the Committee, the Canadian Environmental Network's (CEN) Toxics Caucus gave its support for "sunset" provisions in CEPA:

A Sunset Chemical Protocol should be adopted, designed to identify the hazardous characteristics of the substances of greatest concern (such as those that are persistent and bioaccumulative), and timetables developed to phase them out.¹¹

The Canadian Manufacturers of Chemical Specialties Association, the Canadian Chemical Producers' Association and the Soap and Detergent Association of Canada urged a more restrictive approach to sunseting. They preferred that the *Agenda 21* standard for bans and phase-outs be incorporated in CEPA.¹² As stated by the Canadian Chemical Producers' Association:

Currently it is at the Ministers' discretion as to when, for example, they would ban a substance under section 29(1)(b) or under section 34(1)(l). Rather than leaving this discretionary, CCPA recommends that the UNCED standard for bans and phase-outs be incorporated into Part II of CEPA pertaining to toxic substances such that phase-outs or bans should be applied for chemical uses that are determined to pose an unreasonable and otherwise unmanageable risk. We believe that this will apply to very few chemicals as bans and phase-outs are a "last resort" risk management option.¹³

The use of numerical pollution reduction targets is also gaining popularity. Several American states have established targets through legislation; the Canadian federal government and a number of provincial governments have employed means other than legislation to encourage similar results.

¹⁰ International Joint Commission, *Sixth Biennial Report on Great Lakes Water Quality*, Washington and Ottawa, 1992, p. 25.

¹¹ Canadian Environmental Network's (CEN) Toxics Caucus, *The Canadian Environmental Protection Act: An Agenda For Reform*, Brief to the Committee, November 1994, p. 11.

¹² In dealing with the management of toxic chemicals, Chapter 19 of *Agenda 21* recommends the establishment of risk reduction programs with the objective of eliminating unacceptable or unreasonable risks and, to the extent economically feasible reducing risks posed by toxic chemicals by employing a broad-based approach. Part of this approach could encompass both regulatory and non-regulatory measures for the phasing out or banning of chemicals that pose an unacceptable and otherwise unmanageable risk to human health and the environment and of those that are toxic, persistent and bioaccumulative and whose use cannot be adequately controlled.

¹³ Canadian Chemical Producers' Association, *Brief to the Committee*, September 1994, p. 33.

Witnesses also pointed out that it is important for a pollution prevention regime to have goals and targets that send the appropriate signals and promote accountability of all interests by assessing progress. In its submission the Canadian Environmental Law Association (CELA) recommended that there be requirements for the setting of sectoral- and facility-based goals and targets to meet national goals and to adjudge progress generally. CELA also noted that when setting targets, there must be a means in place to monitor progress. For this reason, CELA also recommended reforming the National Pollutant Release Inventory (NPRI) which currently requires producers and users to report only on releases. As CELA observed, the NPRI could be a much more effective means of promoting pollution-prevention if it also required reporting on whether the business has undertaken various pollution prevention initiatives, including pollution-prevention plans and source-reduction strategies. If changed in this manner the NPRI would enable the federal government and the public to measure progress toward achieving pollution-prevention goals and targets.

The Committee shares the view of the many witnesses who argued that the substances that pose the greatest threat to the environment and human health should be banned. At the same time, the Committee recognizes that an immediate ban may not always be appropriate. In some cases, a period of transition may be required to ensure that *safer* alternatives are developed and to allow a suitable time for economic and social adjustment. The Committee recognizes that the sunseting process provides for such adjustment periods where required. Furthermore, the Committee agrees that by allowing a period of time before a substance is banned, the sunseting approach should help stimulate environmentally friendly technological innovation.

The Committee also believes that in some cases, regulations should prescribe a partial sunset where the objective is not total elimination, but only partial elimination according to a prescribed schedule. We are also of the view that the federal government should continue to encourage challenge targets for pollution reduction, and that the National Pollutant Release Inventory should be revised to provide the means for the federal government to monitor progress toward implementing pollution-prevention efforts and attaining challenge targets.

RECOMMENDATION
37

The Committee recommends that CEPA be amended to include enabling powers for sunseting substances.

RECOMMENDATION
38

The Committee recommends that the federal government continue to encourage negotiated challenge targets for pollution reduction.

RECOMMENDATION
39

The Committee recommends that the National Pollutant Release Inventory be revised to include reporting requirements that will enable the federal government to measure progress toward the implementation of pollution-prevention initiatives and the attainment of various pollution-prevention targets.

ADDITIONAL MEANS BY WHICH CEPA CAN PROMOTE POLLUTION PREVENTION IN CANADA

The federal government does not have exclusive jurisdiction over pollution activities; provincial, territorial and municipal governments also play an important role. Moreover, many polluting decisions are made by private decision makers in response to a wide range of social, economic and legal factors, only a few of which can be directly controlled by environmental laws. Nevertheless, as we have previously noted, the federal government can influence ideas and behaviour indirectly in a variety of ways to promote pollution prevention as a national goal. To this end, Part I of CEPA could authorize the Minister to undertake a number of initiatives to promote and facilitate the voluntary adoption of pollution prevention on a national basis.

Model Pollution-Prevention Plans

Witnesses supported amendments to Part I of CEPA, to encourage voluntary pollution-prevention planning in *all* industrial facilities across Canada, not just in those required to do so under CEPA with respect to the substances they use. Specifically, witnesses suggested that Part I of CEPA should be amended to authorize the federal government to lead the development of national model guidelines for pollution-prevention planning in all industrial sectors. They noted that governments at all levels can and should draw upon each others' strengths and experiences to develop joint pollution-prevention planning guidelines, thereby reducing duplication of effort and expense, and producing a superior program at lower cost to the Canadian taxpayer.

The Committee holds the view that pollution-prevention planning should be applicable across all industrial sectors, including agriculture, natural resources, energy and transportation. In this regard, the Committee agrees that voluntary pollution-prevention planning should be promoted through Part I of CEPA. This would allow the federal government to develop, in close collaboration with the provinces, national model guidelines for pollution-prevention planning in all sectors. We believe that all sectors might benefit from model pollution-prevention planning guidelines being promoted across Canada under the leadership of the federal government.

The Committee recommends that Part I of CEPA be amended to authorize the Minister to develop model pollution-prevention planning guidelines and to encourage the development of voluntary pollution-prevention planning.

RECOMMENDATION
40

Technology Development and Transfer

The importance of technological development and transfer in the shift toward pollution prevention cannot be over-stressed. One of the objectives of pollution prevention is to eliminate the generation and use of pollutants in production processes and products by means of materials substitution, equipment modifications, product reformulation, and efficient use and conservation of natural resources. The Committee

believes that such a focus should also carry economic benefits. There is already abundant evidence that the information technologies, new materials technology and biotechnology have important parts to play in a sustainable economy — through conserving natural resources, reducing waste and pollution, and achieving cleaner and more efficient alternatives to wasteful production processes.

Section 7 in Part I of CEPA currently provides that the Minister of the Environment may collect data, conduct research and establish demonstration projects on the “control and abatement of environmental pollution”. In carrying out these activities the Minister may sponsor, or may act alone, or in cooperation with any government, institution or person to conduct research related to the control or abatement of environmental pollution. Several witnesses, including the Canadian Environment Industry Association, argued that the Act should be amended explicitly to target research and demonstration projects that emphasize clean technologies, as well as pollution control and abatement technologies.¹⁴ Similarly, the Environmental Law Section of the Canadian Bar Association noted that “sections 7(1)(e) and 7(3) of CEPA should be amended to promote technology as a means to advance sustainable development”.¹⁵

The Committee agrees with the witnesses who stressed the importance of technological development and transfer in the shift to pollution prevention. We note that new and innovative technologies are being developed to prevent pollution problems from occurring. Properly managed, many of these technologies will undoubtedly help to conserve natural resources, reduce waste and pollution, and achieve cleaner and more efficient alternatives to wasteful production processes and polluting products.

Technology development and transfer programs facilitate greater awareness, innovation and adoption of advanced environmental technologies. Such programs also involve the diffusion of technical knowledge. We believe, however, that technology development and transfer programs authorized by CEPA should be focused primarily on promoting pollution prevention measures, rather than on end-of-pipe solutions.

The Committee commends the federal government for launching a *Strategy for the Canadian Environmental Industry* in September 1994. The strategy is designed to improve the industry's access to government programs and services, support technology development and commercialization, and increase dominance in both the domestic and international environmental market. The Committee notes, however, that recent budget cuts at Industry Canada and Environment Canada have threatened this initiative. In *Creating Opportunity* the Liberal Party noted that the development of cutting-edge green technologies will require institutional support and funding for research and development, and committed itself to “make environmental technologies

¹⁴ Canadian Environment Industry Association, Brief to the Committee, October 7, 1994, p. 12.

¹⁵ The Environmental Law Section of The Canadian Bar Association, Brief to the Committee, December 1994, p. 13.

and services a major component of Canada's strategy for economic growth". The Committee strongly urges that funding be reinstated to the Canadian Environmental Industry Strategy.

The Committee recommends that subsections 7(1)(c), (e) and 7(3) in Part I of CEPA be amended to include the word "prevention" before the phrase "control and abatement of environmental pollution".

RECOMMENDATION
41

The Committee recommends that the federal government reinstate the previously announced funding for the Canadian Environmental Industry Strategy.

RECOMMENDATION
42

National Pollution-Prevention Information Clearinghouse

Authorization for the establishment of a national clearinghouse to provide pollution-prevention information is another strategy mentioned by witnesses for inclusion in Part I. Stuart Hill, formerly of McGill University, for example, noted that "the means to support responsible behaviour through education, research and demonstration are missing from CEPA". (49:8) In a similar vein, the Great Lakes Pollution Prevention Centre recommended that "training, technical assistance and information services being used as agents for change for pollution prevention receive priority treatment in the development of the new CEPA". (41:18) The Committee agrees with these observations and suggests that a national pollution-prevention information clearinghouse would encourage and facilitate industrial adoption of clean production processes and products. The clearinghouse would provide information about demonstrations, development and research focused on new prevention technologies and management initiatives; learning and training materials for those interested in more efficient environmental solutions; and information on award programs highlighting success stories.

The Committee agrees that it is imperative that those subject to pollution prevention planning requirements have available the necessary information to meet their obligations under the Act. The Committee also believes that pollution prevention goals will be more likely achieved if organizations and small businesses have the learning resources and tools to develop pollution-prevention strategies of their own. In this regard, success stories and demonstration projects highlighting the benefits of pollution prevention are additional strategies for promoting and facilitating voluntary adoption of clean production process and products. The Committee recognizes that some learning and training materials that support the shift towards pollution prevention are available both nationally and internationally. We also recognize the useful work of the National Office of Pollution Prevention at Environment Canada. We believe, however, that linking existing databases electronically into a national pollution-prevention information clearinghouse would allow Canadians access to a wider range of information resources.

The Committee recommends that Part I of CEPA authorize the establishment of a national pollution prevention information clearinghouse and of award programs highlighting success stories.

RECOMMENDATION
43

Public Awareness

Canadians are becoming increasingly knowledgeable — and concerned — about environmental issues and, particularly, how to reduce pollution. Many want to know more, however, and are seeking guidance as to how they, as individuals, can assist and participate in pollution prevention.

The Committee is of the view that pollution prevention will be successfully achieved if individual Canadians are made aware of its merits. Pollution prevention requires the participation not only of governments and industry, but also of individual Canadians. Practical information illustrating how pollution prevention affects our daily lives should encourage individuals and communities to work with governments and other sectors of society for the common good. The Committee also believes that the fundamental changes required to ensure sustained progress in this direction will require concerted public pressure and reduced demand for some goods. In this connection, consumers should also be encouraged to use their purchasing power to promote pollution prevention.

The Committee believes that access to information on pollution prevention should be improved. The Committee is also of the opinion that the federal government must act as a catalyst to improve public awareness of the merits of pollution prevention. We recognize that the necessary expertise and capacity for raising the general level of environmental literacy in Canada lies largely outside of government. Nevertheless, the federal government can encourage communities and organizations to work with each other and with government to help Canadians become better informed and more involved. The government can also promote long-term partnerships leading to cooperative environmental learning and action programs in which all Canadians can participate.

To that end, environmental citizenship programs can assist Canadians to acquire knowledge, skills and values that will lead to more awareness, better understanding and commitments to action. Such programs can also encourage citizens to work toward pollution prevention on their own and to demand pollution prevention from their employers and from the producers of the goods they consume. They can help Canadians make better individual and collective decisions with respect to the environment, and be aware of the need to support pollution prevention.

Environmental labelling is another means by which consumers can be made aware of products that are environmentally friendly. The purchasing power of informed consumers also gives industry an economic incentive to develop environmentally safe products. In this regard, the Environmental Choice Program, which focuses on stimulating demand for environmentally responsible products and services, is an excellent example of pollution prevention in practice. The Environmental Choice Programs guidelines are published in the *Canada Gazette*, in accordance with section 8 of Part I of CEPA.

The Committee is aware that Environment Canada is currently undertaking a number of initiatives supporting the objective of increasing public awareness of the

merits of pollution prevention. We note, however, that such initiatives have been affected by recent budget cuts to the Department. The Committee urges the federal government to reinforce rather than weaken its environmental public awareness programs. We believe that promotion of public awareness of pollution prevention is a necessary step in furthering the goal of pollution prevention in Canada.

The Committee recommends that the federal government reinforce rather than weaken its environmental public awareness programs.

RECOMMENDATION**44**

Integrated Permitting

Integrated permitting is a strategy to consolidate the multiple, environment-related permits from federal, provincial and local governments with which an industrial facility often has to comply. This strategy is designed to overcome the problems discussed by many of the industry witnesses, who told the Committee that the time and costs associated with complying with the myriad of different environmental permits and other requirements from federal, provincial and municipal governments can pose a major impediment to implementing pollution-prevention programs. In some cases, witnesses argued, the various permitting requirements present conflicting requirements that may impede a concerted effort to improve a facility's overall environmental performance. In any event, many argued, the costs associated with sorting out the different rules and in complying with the paperwork reduces the resources available to invest in longer term, more proactive pollution-prevention initiatives.

While some OECD countries, such as Sweden, have long employed integrated permitting across environmental media including air, land and water as a way to overcome these problems, most countries have only recently begun to shift their regulatory programs to a more integrated, source-oriented and multi-media base. Recently, various jurisdictions in the United States have taken innovative steps in this direction. The U.S EPA is engaged in a number of joint initiatives with individual companies to explore the potential for coordinating permit reviews across environmental media. The *New Jersey Pollution Prevention Act* directs the New Jersey Department of Environmental Protection to explore the possible benefits of multi-media permitting for pollution prevention.

The rationale behind these initiatives is that an approach which addresses in an integrated manner all the environmental aspects of a single facility's environmental performance should make more apparent the value of reducing releases of all kinds and across all environmental media — thereby enhancing the attractiveness of adopting a pollution-prevention strategy. Recent evaluations of these initiatives in the United States and Europe suggest that they are generally more cost-efficient in stimulating preventive actions, such as process changes, than are strategies that rely on end-of-pipe treatment. A recent OECD review, for example concluded that "it can be argued that

integrated permitting . . . has been beneficial for regulators and facility operators alike".¹⁶

The Committee recognizes that this approach cannot be mandated in CEPA because of the shared federal-provincial jurisdiction over environmental permitting. Nonetheless, the Committee believes that the federal government should begin to explore the possibilities of such a cooperative, inter-jurisdictional approach.

RECOMMENDATION

45

The federal government should explore with the provinces the possible benefits of integrated permitting strategies.

Extended Producer Responsibility

In 1988 the then federal government claimed that CEPA would provide a means to prevent pollution by addressing the full life cycle of toxic substances. Although most of the witnesses who appeared before the Committee still endorse the need for full "life cycle management", many complained that CEPA has not provided an effective mechanism for achieving that objective. As we note above, much of the evidence received by the Committee focused on the need to create economic frameworks and incentives to ensure that pollution prevention decisions are made as early as possible in the life cycle of a toxic substance. Nonetheless, many witnesses agreed that, inevitably, some toxic substances will continue to be generated and used. The issue then becomes how to ensure that the toxic substances used are not released into the environment.

In addition to the economic instruments and other incentives described above, the Committee notes that a number of European countries have recently introduced "extended producer responsibility" policies that encourage the reduced use of hazardous materials and the increased recyclability of products, by holding producers responsible for the environmental effects of certain products throughout their product life-cycles. A recent United Nations publication observes that the rationale behind these policies is twofold. First, in most cases the producer is best placed to minimize the effects of the substances it uses in manufacturing its products. Second, it is generally more efficient to require a manufacturer to take precautionary action in the design of its products or to arrange for their ultimate disposal than to impose such costs on consumers who can exert only an indirect influence on product design.¹⁷

Extended producer responsibility is a relatively new concept, and the Committee did not hear enough evidence to endorse it unequivocally. Extended producer responsibility obviously need not be restricted to products containing toxic substances. In theory, the concept might be a useful way to reduce solid waste and to encourage reusable and recyclable products of all sorts. On the other hand, we do not know enough

¹⁶ OECD, *Reducing Environmental Pollution: Looking Back, Thinking Ahead*, 1994, p. 28.

¹⁷ Extended Producer Responsibility as a Strategy to Promote Cleaner Products, Invitational Expert Seminar, Trolleholm Castle, Sweden, May 4, 1992.

about the costs of administering such a policy, or about the economic implications such a policy might have for Canadian industry. Nor do we know enough about the circumstances or issues to which it could be most effectively applied. Nonetheless, the Committee recognizes the importance of striving continually to develop new, more effective and efficient policies. The Committee therefore believes that the government should investigate the potential for extended producer responsibility policies to reduce the use and control the effects of toxic substances in Canada.

The Committee encourages the federal government to learn about and consider applying “extended producer responsibility” policies to firms that use substances that are regulated under CEPA.

RECOMMENDATION

46

OCEAN DUMPING AND COASTAL ZONE MANAGEMENT

OCEAN DUMPING

Introduction

For centuries, the ocean has been regarded as a safe and convenient place to get rid of waste. In 1972, however, the international community finally recognized the need to protect human health and the marine environment and to safeguard legitimate uses of the world's seas. This concern resulted in the adoption of the London Convention, 1972 aimed at preventing further pollution at sea caused by the dumping of waste and other substances. The United Nations Conference on Environment and Development held, in Rio de Janeiro in 1992, re-examined this issue and, in Chapter 17 of its *Agenda 21*, encouraged governments to take appropriate action to put a stop to the dumping of waste at sea.

Canada fulfils its international obligations under the London Convention, 1972 through Part VI of CEPA, which was formerly the *Ocean Dumping Control Act*. Part VI now regulates ocean dumping by a system of permits and inspection. Schedule III lists substances that may not be dumped and was amended in September 1994 (*Canada Gazette, Part II*) to take into account the changes made to the Schedules of the London Convention, 1972 in November 1993. It is now forbidden to dump industrial waste (with the exception of dredged material, fish waste, ships, platforms and other manufactured structures at sea, uncontaminated inert geological material and uncontaminated organic material of natural origin); and radioactive wastes or other radioactive material.

Notwithstanding these recent changes, the ongoing evolution of international law in this area will require further changes to CEPA in the near future. For example, other amendments to the London Convention, 1972 could be made by 1996 on such matters as the adoption of a Waste Assessment Framework, adoption of the precautionary principle, and the application of the Convention to inland seas (Part VI already covers inland waters).¹ Other amendments to CEPA may also be required when Canada ratifies the United Nations Convention on the Law of the Sea.

In 1991, in response to the Auditor General's criticisms of the administration of Part VI of CEPA, and in response to an earlier evaluation of CEPA, the Ocean Dumping

¹ Environment Canada, *Canadian Environmental Protection Act: Report for the Period from April 1993 to March 1994*, p. 35.

Action Plan was introduced as part of the Green Plan. Also, the *Ocean Dumping Regulations* were amended, a program for monitoring dump sites was introduced and monitoring guidelines on physical, biological and chemical aspects of waste disposal were adopted. Support to science and research was increased (development of bio-assays for sediment evaluation, etc.) and a program for dealing with persistent plastics was launched.

The CEPA Evaluation Report prepared for Environment Canada in 1993 noted differences between the Atlantic and Pacific regions with respect to dumping of fish waste, bio-assays and regulated substances.² Environment Canada has since indicated that amendments to the *Regulations* and the application of newly formulated guidelines and protocols should eliminate these differences.³

The Committee received testimony about several issues relating to ocean dumping. These issues are discussed below.

Consistency With CEPA's Guiding Principles

Several witnesses noted that the former *Ocean Dumping Control Act* had been integrated virtually as a whole into CEPA, and that there had been little attempt to harmonize its provisions with the other Parts of CEPA. Moreover, the provisions of Part VI make no reference at all to the general principles of environmental protection—namely pollution prevention, the precautionary principle, the user/producer responsibility (reverse onus) and the ecosystem approach—which are central to the Act. The Committee recommends that this discrepancy be addressed without delay and that these guiding principles be incorporated into Part VI and that it be made consistent with the other parts of the Act.

The West Coast Environmental Law Association (WCELA) suggested that CEPA be amended to require applicants to demonstrate that it is impossible to avoid creation of waste in the first place.⁴ WCELA argued that this would be consistent with the Waste Assessment Framework which may be added to the London Convention, 1972 in 1996. In fact, amendments to the *Regulations* have already made it possible to incorporate the Waste Assessment Framework into the permit application. The applicant must indicate what alternatives to dumping have been considered, and assess the waste to be dumped in terms of the potential to reduce, reuse or recycle the waste instead of dumping it. Nonetheless, the Committee recognizes that it would be beneficial to integrate the Assessment Framework and the precautionary principle into Part III of Schedule III (factors to be considered in issuing a permit) of CEPA. Combined with the cost of a permit, this should result in increased recycling of wastes such as fish and seafood residues in fish processing plants.

² Environment Canada, Evaluation Branch, *Evaluation of the Canadian Environmental Protection Act: Final Report*, December 1993, pp. 70-71.

³ Environment Canada, *Response to the CEPA Evaluation Report*, Ottawa, March 14, 1995, p. 22.

⁴ West Coast Environmental Law Association, *Ocean Dumping*, Brief to the Committee, September 13, 1994, p. 2.

To some extent the principle of user/producer responsibility is already present in the current dumping permit application procedures which require a great deal of information from an applicant. WCELA has suggested, however, that the reversal be made explicit in the *Act* and applied exhaustively. David VanderZwaag of Dalhousie University went further, suggesting that one application of the precautionary principle would be to enact an exclusive list of what could be dumped and forbid the dumping of anything not on the list. Such a list would probably include dredge spoils, fish waste, vessels and inert materials of natural origin (55:48).

The Committee recognizes that for financial and practical reasons it may be unrealistic to expect an applicant to prove that ocean dumping poses no risk to the marine environment. However, the Committee endorses the recommendation of the Canadian Environmental Network's Toxics Caucus, which suggests amendment of CEPA to require proof from applicants that ocean dumping is the best option from an environmental perspective.

Such a recommendation has also been made by the Inuit Tapirisat of Canada as well as residents of northern communities who appeared before the Committee in the North. Part VI of CEPA includes the monitoring of dumping into the Arctic waters and on pack ice, as defined in the *Arctic Waters Pollution Prevention Act*. Many witnesses strongly recommended that a hierarchy of waste disposal options be respected, particularly in the North. The removal of materials from the Arctic once the activity has ceased should be preferred to inland disposal. In Chapter 13 of this Report the Committee agrees with these suggestions and recommends that ocean dumping should be permitted in the North only in extraordinary circumstances and strictly as a last resort.

The Committee also believes that ocean dumping should be based on the polluter-pays principle. It is generally acknowledged that the polluter-pays principle should dictate the level of permit fees and cost recovery for compensating individuals for adverse effects or restoring the environment.

Environment Canada has recently expanded considerably the function of science in assessing both the risk of dumping waste and the suitability of waste for dumping, especially with the introduction of bio-assays. However, the Department itself recognizes that more work is required on assessing long-term and cumulative effects on the marine ecosystem.⁵ The Canadian Environmental Network's Toxic Caucus notes that critical ecological zones such as spawning grounds, benthic nutrient pumps and commercial fishing zones are not explicitly protected by Part VI.⁶ (Fishing zones are now protected under the *Fisheries Act*.) Including the ecosystem approach in the provisions of Part VI is likely to encourage ecosystem-oriented research into waste assessment methods.

⁵ Environment Canada, Evaluation Branch, *Evaluation of the Canadian Environmental Protection Act: Final Report*, December 1993, p. 73.

⁶ Canadian Environmental Network's Toxics Caucus, *The Canadian Environmental Protection Act: An Agenda for Reform*, Brief to the Committee, November 1994, p. 15.

The Committee recommends that Part VI of CEPA be amended to include explicit references to the polluter-pays principle, the ecosystem approach, the precautionary principle and the pollution prevention principle.

RECOMMENDATION
47

The Committee recommends that Part VI of CEPA be amended to forbid ocean dumping of any substance not on an exclusive list of authorized substances.

RECOMMENDATION
48

The Committee recommends that Part VI of CEPA be amended to require permit applicants to prove that ocean dumping is the best option from an environmental perspective.

RECOMMENDATION
49

The Committee recommends that the forthcoming Waste Assessment Framework of the London Convention, 1972 be made an official part of the Act by incorporating it into Schedule III Part III of CEPA.

RECOMMENDATION
50

The Committee recommends that Part VI of CEPA be linked more explicitly to Part I (Environmental Quality Objectives), Part II (Toxic Substances) and Part III (Nutrients), and any other appropriate parts of the Act.

RECOMMENDATION
51

Permit Fees

Permit fees, which are set by regulation, were increased in 1993. Previously between \$50 (most common case) and \$1,000, a flat fee of \$2,500 is now charged to cover Environment Canada's cost of processing an application. Nonetheless, the new fees do not fully recover the complete cost of the ocean dumping program which also include monitoring, enforcement and public consultation.⁷ The Committee recognizes that higher fees may result in more illegal dumping. Nevertheless, we believe that higher fees would be an effective way to encourage more recycling. Moreover, we note that even a moderately higher fee would not be excessive compared to the costs of dredging and tipping. Finally, we note that Environment Canada has indicated its willingness to increase permit fees to cover the full costs of its ocean dumping program.

The Committee recommends that Part VI of CEPA be amended to allow for increases in permit fees, to cover at least the full cost of public consultation, monitoring and enforcement.

RECOMMENDATION
52

According to some witnesses the polluter-pays principle is not being respected because the cost of a permit does not vary in relation to the nature, volume or toxicity of the wastes being dumped or to the frequency of activity.⁸ Environment Canada argues

⁷ West Coast Environmental Law Association, op. cit., 1994, p. 2.

⁸ Dr. Stan Dromisky, Ocean Dumping and CEPA, Brief to the Committee, May 11, 1995, p. 7, West Coast Environmental Law Association, op. cit., 1994, p. 2.

that from an administrative standpoint, it is most efficient to impose a fixed fee.⁹ The Fisheries Council of Canada expressed concern about the financial burden the current flat fee of \$2,500 poses for small or seasonal fishing companies and for operators in areas where there is no local facility capable of recycling fish wastes (e.g., in the Atlantic region).¹⁰

The Committee encourages Environment Canada to revise its fee structure to reflect the nature and quantity of the wastes being dumped. In the Committee's opinion, it should be feasible to set fees on a sliding scale to ensure that the revenue would cover the full cost of administering such a fee structure.

RECOMMENDATION
53

The Committee recommends that the Department of the Environment review its fee structure for ocean dumping permits and strongly recommends that, within one year of the presentation of this Report to the House, the Department adopt a sliding fee scale to reflect the nature and quantity of wastes being dumped.

Definition of Ocean Dumping

Subsection 66(1) of CEPA now defines ocean dumping as:

... the deliberate disposal at sea from ships, aircraft, platforms or other anthropogenic structures, including disposal by incineration or other thermal degradation, of any substance.

Placing substances offshore on pack ice is also considered to be dumping.

WCELA has pointed out that this definition is not sufficiently broad and that it should be extended to include disposal from wharves and disposal of debris in intertidal zones. WCELA also recommended including the destruction and subsequent dumping of artificial islands and other manufactured structures.¹¹ The Canadian Environmental Network's Toxics Caucus endorses WCELA's definition. Environment Canada, Atlantic Region, expressed reservations about the administrative costs such an expansion of the definition would entail (55:22). At present, disposal from wharves and in intertidal zones is covered under the provisions protecting fish habitats in the *Fisheries Act*, and under other provincial laws and regulations. Nevertheless, a large number of wharves are under federal jurisdiction, and the Department's current policy is to issue permits for disposal from federal wharves.

The Committee is aware of the political and jurisdictional questions that may arise if the definition of dumping is broadened. However, the Committee favours a strong federal role and, given the need to protect coastal zones, it endorses the suggestion that

⁹ Environment Canada, *Evaluation Branch, Evaluation of the Canadian Environmental Protection Act: Final Report*, December 1993, p. 72.

¹⁰ Fisheries Council of Canada, letter to the Hon. Charles Caccia re CEPA, Ottawa, September 16, 1994, p. 1.

¹¹ West Coast Environmental Law Association, op. cit., 1994, p. 3.

the definition of ocean dumping in CEPA should be amended to include the disposal of substances from wharves and in intertidal zones. The Committee also recommends that the destruction and subsequent disposal at sea of artificial islands and other manufactured structures be forbidden except under permit.

Under subsection 66(1), the definition of dumping exempts:

... any disposal that is incidental to or derived from the normal operations of a ship, aircraft, platform or other anthropogenic structure

and

... any discharge that is incidental to or derived from the exploration for, exploitation of and associated off-shore processing of sea bed mineral resources.

The Manitoba Environmental Council proposed that such activities should *not* be exempt from the dumping provisions. While agreeing with the Council's opposition to exemptions, the Committee observes that many of these day-to-day activities are already regulated by many other laws and regulations in specific areas. For example, ships navigating in Canadian waters and fishing zones are subject to strict regulation, particularly under the *Canada Shipping Act* (fuels, garbage, pollutants, etc.) and by the *Arctic Waters Pollution Prevention Act* (the *Arctic Waters Pollution Prevention Regulations* govern discharges of fuels, garbage, wastewater, etc.). The *Aeronautics Act*, the *Harbour Commissions Act* and, to a lesser extent, the *Public Harbours and Port Facilities Act* also have implications for these activities. It would be redundant to regulate such activities under CEPA as well.

The Committee recommends that the definition of “ocean dumping” in Part VI be amended to include the disposal of substances from wharves and in intertidal zones. The Committee further recommends that the definition include the destruction and subsequent disposal at sea of artificial islands and other manufactured structures.

RECOMMENDATION
54

Public Participation

The question of public participation is considered at length elsewhere in this Report. With respect to ocean dumping, the concerns brought to the Committee's attention by environmental groups include the limited opportunities for the general public to play a role in the issuance of permits. At present, CEPA does not provide an absolute right for public comment on applications before a permit is issued. A member of the public can obtain a board of review hearing only if the Minister “considers it advisable”

(subsection 89(3)).¹²

Some witnesses also observed that CEPA does not adequately account for the fact that damage can occur to private property as a result of legally permitted ocean dumping. CEPA does not provide any mechanism for compensating those affected by dumping.

The Committee therefore recommends that communities that may be adversely affected by dumping be able to participate in the general planning process for selecting dumping sites. The Committee further recommends that the *Act* be amended to provide for a period of time during which the public can comment on permit applications before permits are issued. We also recommend that CEPA be amended to allow any person to appeal a decision regarding the issuance of a permit. This could entail a requirement in the *Act* for a waiting period, during which the public may request a re-evaluation by a board of review under subsection 89(3). We recommend that CEPA be amended to include a mechanism to compensate persons who have suffered as a result of dumping, based on the polluter-pay principle.

These recommendations (with the exception of the first) are set out in Chapter 14 of this Report, dealing with public participation.

RECOMMENDATION

55

The Committee recommends that individuals and/or communities likely to suffer adverse effects as a result of dumping be enabled to participate in the general planning process for selecting ocean dump sites.

Contaminated Sediment

Canada Ports Corporation, the Vancouver Port Corporation and Seaspan International Ltd. of Vancouver all raised a difficult question before the Committee — a complex technical aspect of the application of the provisions on dumping in CEPA and the *Regulations*. Because some ports, like Vancouver, regularly fill with silt, constant dredging is necessary to maintain access for shipping to the channels and terminals, and to construct new berths (64:35). The Port of Saint John has the same problem.

Dredged sediment may have been contaminated by past practices or by pollution from untreated municipal sewage (64:35). Disposal of such contaminated sediment is nonetheless subject to the provisions of the *Ocean Dumping Regulations*, which set the maximum concentrations for certain contaminants. Paragraph 71(3)(a) provides that when contaminants exceed maximum concentrations, a permit may be issued despite the high levels of concentration if it can be demonstrated that the contaminants can be “Rapidly Rendered Harmless” (RRH) by seawater. A protocol to this effect (the “RRH protocol”) has been developed by the government but according to the

¹² West Coast Environmental Law Association, op. cit., 1994, p. 3.

witnesses, without the input of interested parties (64:36). Materials that do not pass tests under this protocol cannot be disposed of at sea, and the users must find other, more expensive solutions.

Some witnesses recommended that the provisions of the RRH protocol be simplified and that regional solutions be developed (64:36-37). Others argued that the protocol does not adequately cover two of the most important options for addressing this problem. A representative of the Seaspan company explained to the Committee that the two main alternatives to the dumping of such dredged material are “confined aquatic disposal” and “shoreline confined disposal”. These disposal methods are widely practised in the United States (Puget Sound) and in Europe, and have proven to be effective (64:36). Seaspan and other witnesses recommended that these methods be considered and recognized by Environment Canada, in order to increase the competitiveness of Canadian companies and to contribute to respect for the environment (64:37).

According to Environment Canada, these methods would require the introduction of a monitoring program of short- and long-term environmental impacts and this would not necessarily guarantee greater protection of the marine environment.

Apart from these two methods, the alternatives to ocean dumping are bio-remediation of contaminated sites, washing, soil stabilization and dumping at approved sites. Witnesses argued that the expense of these alternatives might endanger the commercial viability of firms required to use them.¹³ Moreover, disposal on land is under provincial jurisdiction, which further complicates the issue. The Committee is concerned that this may lead to the occasional illegal dumping of waste, either at sea or on land.

The Committee wishes to convey the witnesses’ concerns to the government and, being aware of the scale of the problem, recommends the following:

The Committee recommends that, within two years of this Report being presented to the House, the Department of the Environment initiate a process to include environmentally sound, practicable and effective regional solutions for disposal of contaminated sediment, and ensure that both the general public and the economic stakeholders concerned have an opportunity to participate in the process.

RECOMMENDATION
56

In his brief to the Committee based on his investigation of ocean dumping on the West Coast, Dr. Stan Dromisky, M.P. and former member of the Committee, raised the issue of unauthorized dumping. According to Dr. Dromisky, there was a high probability of illegal dumping of dredged sediments in the Malaspina Strait. Evidence

¹³ Seaspan International Ltd, Brief to the Committee, p. 2.

of this activity was revealed by random sonar scanning outside designated dumpsites.¹⁴ Dr. Dromisky further noted that, due to the scarcity of resources, monitoring and inspections cannot effectively control unauthorized dumping. The monitoring and enforcement program needs to be strengthened to prevent such activities. The Committee strongly supports Dr. Dromisky's recommendation that more inspections are required at the load sites and during the attendance/observation phase of the disposal process.¹⁵ The recommendations on enforcement made later in this Report are relevant to this issue (see Chapter 15).

Lists of Prohibited and Regulated Substances

Parts I and II of CEPA Schedule III consist, respectively, of the list of substances prohibited for the purposes of ocean dumping and the list of regulated substances. There is no reference to these lists in the body of the Act, unlike Part III of the Schedule (factors to be considered in issuing permits). A technical amendment should thus be made to CEPA to give legal authority to Parts I and II of Schedule III. However, if the government adopts the recommendation that all ocean dumping be prohibited, with the exception of substances on an exclusive list, then the list of prohibited substances (Part I of Schedule III) would no longer serve any purpose.

RECOMMENDATION 57

The Committee recommends that Part VI of CEPA be amended to incorporate Schedule III, Part I and Part II.

Conclusion

The Department of Fisheries and Oceans (DFO) is proposing a Canada Oceans Act which would provide a framework for ocean management. This could involve transferring to the proposed Canada Oceans Act the existing provisions of Part I of CEPA relating to the marine environment and those of Part VI of CEPA relating to ocean dumping. The provisions of Part VI of CEPA encompass dumping in Arctic waters (and placing substances on pack ice) as set out in the *Arctic Waters Pollution Prevention Act*. The provisions of the *Arctic Waters Pollution Prevention Act* relating to the quality of the marine environment that are currently the responsibility of the Department of Indian Affairs and Northern Development could also be transferred to the Canada Oceans Act.

The Committee specifically requests that, prior to any transfer of responsibilities, Environment Canada conduct an in-depth review of the effect(s) that such a transfer might have on the obligations and capability of the Minister of the Environment to protect the environment, particularly in the North.

¹⁴ Dr. Stan Dromisky, op. cit., 1995, p. 4.

¹⁵ *Ibid.*, p. 10.

The Committee recommends that, prior to any transfer of responsibility with respect to Part VI of CEPA, the Department of Environment conduct an in-depth review of the impact that the transfer could have on the obligations and capability of the Minister of the Environment to protect the environment, including the Arctic environment.

RECOMMENDATION
58

Should this transfer of responsibilities take place, the Committee strongly advocates that the recommendations in this chapter with respect to Part VI of CEPA be considered by the appropriate ministers.

The Committee recommends that, if the provisions of Part VI of CEPA are transferred to another statute, the recommendations in this chapter with respect to amendments to Part VI be included in the new Act.

RECOMMENDATION
59

COASTAL ZONE MANAGEMENT

Introduction

At 244,000 km¹⁶, Canada's coastline is the longest in the world, offering immense diversity from the Atlantic to the Arctic to the Pacific. As transition zones between sea and land, coastal ecosystems host tremendous biodiversity and are among the most productive natural environments on earth.

These ecosystems are under intense pressure as a result of the many human activities that occur in coastal areas and which, therefore, increase their vulnerability. The pressure is increased by burgeoning human populations in coastal communities such as Vancouver, Victoria and Halifax. It is important to observe that the main source of contamination in coastal zones is not ocean dumping. Instead, most contamination comes from municipal wastewater, urban and agricultural runoff, industrial effluent, municipal waste, litter and erosion. The signs of the obvious degradation of Canadian coastal areas are too numerous to list. Along the Atlantic and Pacific coasts, some commercial fishing and shellfishing operations have closed because of wastewater contamination.¹⁷ The toxic effects of pollution, coupled with the overexploitation of resources, have led to habitat loss or degradation and have the potential to destroy biodiversity. Public health is also threatened.¹⁸ More frequent and increasingly intense conflicts between marine resource users have brought the imbalance in coastal zones into sharp focus. The incidence of environmental damage is also high in the coastal ecosystems in the Arctic.

The international community has acknowledged that ocean and coastal areas are being damaged and recognizes their importance in terms of sustainable development. The United Nations Conference on Environment and Development prompted some

¹⁶ Environment Canada, *The State of Canada's Environment*, Ottawa 1991, p. 4-4.

¹⁷ *Ibid.*, p. 4-9.

¹⁸ *Ibid.*, p. 4-29.

countries, including Canada, to develop and adopt integrated coastal zone management (CZM) measures. While CEPA does not now deal with coastal zone management *per se*, the Committee recognizes CZM as an important issue and believes that CEPA should play an important role in CZM.

Definition of Coastal Zone Management

There is no single universally accepted definition of "coastal zone". A number of definitions have been developed and are used by numerous agencies and governments. The notion of a land-sea interface can be described in many ways, depending on the sort of boundary taken into account (ecosystem, administrative, economic or legal). However, it is generally agreed that the coastal zone extends seaward to the limit of the exclusive economic zone (200 miles) and inland, where it may include watersheds or be limited to the immediate shoreline.¹⁹

In *Reviewing CEPA, The Issues #4*, Environment Canada defines coastal zone management (CZM) as follows:

*a dynamic process in which a co-ordinated strategy is developed and implemented for the allocation of environmental, social, cultural and institutional resources to achieve the conservation and sustainable multiple use of the coastal zone.*²⁰

To ensure that coastal resources (land, forests, coastal waters and marine resources) are exploited in keeping with the principles of sustainable development, coastal zones must be managed in a comprehensive manner, bearing in mind local, regional, national and international interests and objectives. For example, both economic practices and tourism policies represent overlapping interests which may impinge on coastal environment protection goals.²¹

The ultimate objective of good coastal zone management is to balance and optimize public use, economic development and environmental protection.²² This includes preserving vital coastal ecosystems and biodiversity, restoring damaged habitats, eliminating land-based sources of pollution, resolving conflicts arising from incompatible uses of coastal areas, and minimizing the negative impact of activities. The Conservation Council of New Brunswick fully endorses the need for coastal zone

¹⁹ Organization for Economic Cooperation and Development (OECD), *Coastal Zone Management, Selected Case Studies*, Paris, 1993, pp. 15-16.

²⁰ Environment Canada, *Reviewing CEPA, The Issues #4, Coastal Zone Management in Canada*, 1994, p. 2.

²¹ OECD, *op. cit.*, 1993, p. 16.

²² Environment Canada *Reviewing CEPA, The Issues #4, Coastal Zone Management in Canada*, 1994, p. 2.

management in both freshwater and saltwater areas²³ and advocates an ecosystem-wide approach.²⁴

Current Initiatives

Establishing and implementing an appropriate CZM framework has been a concern in Canada for some time, but recently there has been renewed interest in this issue. Several provinces have either developed or are developing their own policy or strategy. Nova Scotia is the furthest along, with New Brunswick, Prince Edward Island and British Columbia well engaged in the process. These provinces plan to forge partnerships with the federal government to implement their programs. In British Columbia, estuarine management plans have been developed, including one for the Fraser River which was developed on the basis of a unique multi-stakeholder process jointly sponsored by the federal government and British Columbia. In Eastern Canada, the Gulf of Maine Action Plan involves the cooperation of two provinces and three states, with U.S. and Canadian federal government participation.²⁵

The Federal Legislative Framework

At present, some 15 federal departments and agencies administer approximately 40 pieces of legislation that relate directly or indirectly to Canadian coastal and marine environments.

The *Arctic Waters Pollution Prevention Act* prohibits the unauthorized dumping of any waste either directly into Arctic waters or on land where the waste may enter such waters. The *Canada Shipping Act* protects marine environments from shipping activities. The *Fisheries Act* contains provisions respecting pollution prevention and fish habitat protection. The *Canada Water Act* authorizes the federal government to designate water quality management areas in zones under its jurisdiction or under several jurisdictions, as well as in international or boundary waters. This Act prohibits pollution in these zones and provides for the establishment of water basin management agencies through federal-provincial agreements. (To date, no such zones have been designated.) Although it is unclear whether this Act also applies to marine waters, its potential for CZM is interesting in light of its applicability to watersheds and multi-jurisdictional agreements.

At present CEPA plays a limited role in CZM. Part I of CEPA authorizes the formulation of environmental objectives, guidelines and codes of practice; Part VI controls ocean dumping. Some CEPA regulations are relevant to coastal zones, by controlling pulp and paper mill effluent and nutrients, for example. Overall, however,

²³ Conservation Council of New Brunswick, *Coastal Zone Management: Issues for the 5-year Review of CEPA*, September 1994, p. 2.

²⁴ *Ibid.*, p. 7.

²⁵ Environment Canada, *The State of Canada's Environment*, Ottawa, 1991, p. 4-25.

the scope of CEPA as it pertains to CZM is narrow and, as the Conservation Council of New Brunswick pointed out, "coastal zone management requires a system-wide approach rather than a substance-by-substance approach".²⁶

Statement of Issue

It is apparent from the testimony heard by the Committee, that coastal zone management has not received the attention it deserves in Canada. This may be partly due to the inevitable administrative fragmentation of the issue. Indeed, since coastal zones fall under multiple jurisdictions, it is unlikely that the proposed Canada Oceans Act mentioned earlier in this chapter could provide the authority to regulate the various aspects of CZM.²⁷ However, the proposed legislation would give to the Minister of Fisheries and Oceans the authority to develop and enter into partnership agreements with other ministers or other levels of government. Such agreements would provide for the implementation of an integrated management regime for oceans and coastal waters.²⁸ The Committee questions whether the proposed legislation can address all of the issues relating to coastal zone management.

Land-based sources are responsible for up to 80 per cent of marine pollution.²⁹ In its presentation before the Committee, the Division of Environmental Protection of the Northwest Territories Government mentioned that shorebased contaminants present a serious problem for the health of the Arctic marine environment. The authors of the CEPA Evaluation Report noted that Canada does not have an effective overall strategy to address the problem of land-based pollution—including pollution that contaminates coastal and marine environments.³⁰

Land-based sources of pollution are the responsibility of a number of jurisdictions. Environment Canada regulates toxic substances under CEPA, and administers the pollution prevention provisions of the *Fisheries Act* (section 36). Land and water use in coastal zones is regulated by the federal *Navigable Waters Protection Act* but is also subject to various provincial and local rules.³¹ Local communities are involved in land planning and wastewater management.

The United Nations Law of the Sea Convention contains provisions designed to control pollution of the marine environment from land-based sources. Article 207(1) reads:

States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources, including

²⁶ Conservation Council of New Brunswick, op. cit., 1994, p. 34.

²⁷ Personal communication, G. Swanson, Department of Fisheries and Oceans, Acting Director General, Marine Environment and Habitat, April 5, 1995.

²⁸ Hon. Brian Tobin, *A Vision for Ocean Management*, Department of Fisheries and Oceans, 1994, p. 4-5.

²⁹ Environment Canada, *The State of Canada's Environment*, Ottawa, 1991, p. 4-12.

³⁰ Environment Canada, Evaluation Branch, *Evaluation of the CEPA, Final Report*, December 1993, p. 74.

³¹ *Ibid.*, p. 74.

rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures".³²

Signatories to the Convention have drafted a Global Action Plan which is scheduled for discussion in Washington in the fall of 1995. The Plan calls for action on both regional and national fronts. Since jurisdiction over these matters is shared in Canada, agreements will have to be negotiated with the provinces before programs can be implemented. Upon ratifying the Convention, Canada may have to amend the federal legislation relating to land-based pollution and other aspects of the Convention.

Although some of these issues could be covered by the proposed Canada Oceans Act, CEPA will inevitably continue to play an important role, particularly with respect to land-based pollution from toxic substances.

The U.S. legislation provides an interesting basis for coastal zone management, although the American and Canadian federal systems are not altogether comparable. The U.S. *Coastal Zone Management Act* provides for the establishment of voluntary programs with the states. The federal government provides funds to coastal states willing to undertake coastal management programs, which identify permissible land uses, establish priority uses, designate areas of concern and control coastal erosion and non-point source pollution (runoff, etc.). The U.S. *Clean Water Act* also requires states to prepare non-point pollution management programs which must be taken into account in coastal management programs.

In light of the foregoing, it appears to be impossible for a single piece of legislation — or for a statutory approach alone — to address effectively the overall issue of coastal zone management.

Recommended Improvements

In keeping with the testimony heard, the Committee believes that the issue of coastal zone management in Canada must be addressed as a whole and as it is defined earlier in this section.

As the Environment Canada Issues Paper on CZM stated:

³² United Nations, Office for Ocean Affairs and the Law of the Sea, *The Law of the Sea, Protection and Preservation of the Marine Environment, Repertory of International Agreements Relating to Sections 5 and 6 of Part XII of the United Nations Convention on the Law of the Sea*, p. 1.

*The federal government [must] have in place a clear federal position on CZM, its roles and responsibilities in the coastal zone clearly defined and a strong legislative base for joint implementation.*³³

Accordingly, the Committee considers it advisable to draft a national policy for CZM. Such a policy should be based on system-wide considerations and allow for a cohesive, global approach to CZM. Since CZM is an area of shared jurisdiction, cooperation among federal departments and other levels of government must be facilitated and roles defined. A CZM policy could lead to new federal initiatives. Public participation and cooperation among all stakeholders in CZM should also be encouraged.

Once the shortcomings of the existing legislative framework have been identified, a new, stronger foundation for a CZM policy could be laid. In addition, the *Canada Water Act* should be examined to ensure it has the authority to deal effectively with water basin pollution management.

The Committee also believes that CEPA must be used by the federal government to make progress with CZM. In addition to the changes to the ocean dumping provisions in CEPA noted above, the Committee believes that Part I should play a role in formulating environmental objectives and codes of practice designed to preserve the quality of the coastal environment and control land-based sources of pollution. Provisions respecting research and monitoring (section 7) could also target CZM ecosystem-based issues.

In response to a proposal by WCELA, the Committee recommended that the definition of ocean dumping in Part VI be reformulated to include disposal from wharves and disposal of debris in intertidal zones as well as the destruction and subsequent disposal of artificial islands and other artificial structures. Thus, in combination with other legislation, CEPA will promote and should eventually achieve the goals of CZM.

RECOMMENDATION
60

The Committee recommends that if the provisions of CEPA applicable to CZM are transferred to another statute, the recommendations in this chapter on CZM be included in the new Act.

RECOMMENDATION
61

The Committee recommends that the federal government lead in the formulation of a national coastal zone management policy.

RECOMMENDATION
62

The Committee recommends that the existing federal legislative framework, including Part VI of CEPA, be evaluated and amended to favour coastal zone management.

³³ Environment Canada, *Reviewing CEPA, The Issues #4, Coastal Zone Management in Canada*, 1994, p. 5.

The Committee recommends that Part I of CEPA be amended to authorize the formulation of environmental objectives and codes of practice to preserve the quality of coastal ecosystems and to prevent land-based sources of marine pollution. Part I should also authorize CZM-based research and monitoring.

RECOMMENDATION

63

Transboundary Water Pollution

Environment Canada is involved in a number of aspects of international water issues. However, concern has been expressed that transboundary water pollution is not included in Part V of CEPA in the same way as is international air pollution. Pollution of the waters we share with the United States in particular is an extremely important issue. Extending Part V to water would enable Canada to benefit from section 310 of the United States *Clean Water Act*. Section 310 of the *Clean Water Act* requires the Administrator of the U.S. Environmental Protection Agency to take certain action to identify and abate water pollution that is endangering the health or welfare of persons in a foreign country. This requirement only applies however, to those countries which provide similar rights to the United States. In the Committee's view, CEPA should be amended to provide for such a requirement.

Subsections 61(1) and 63(1) in Part V of CEPA set out the obligations and responsibilities of Canada in regard to international air pollution. The Committee believes that the federal government has the same obligations and should have the same authority to prevent transboundary water pollution as it has with respect to international air pollution. Although some of these powers are provided for in the *International Boundary Waters Treaty Act* (enacted by Parliament in 1911 to implement the 1909 Boundary Waters Treaty), that Act is not sufficient to satisfy Section 310 of the U.S. *Clean Water Act*. The Act provides for the appointment of commissioners who sit on the Canadian component of the International Joint Commission (IJC). However, the IJC has authority to study only issues which are referred to it by one or both of the Canadian or American federal governments and which affect Canada-U.S. boundary waters.

The IJC has no powers of its own to correct transboundary water pollution problems, nor does the IJC have jurisdiction over the important environmental issues related to the Arctic Ocean. Given the limited authority of the IJC, the Committee believes that Canada should have adequate authority to prevent and correct transboundary water pollution that could violate other international treaty obligations with the United States and any other foreign country. The powers should extend beyond the ocean dumping provisions currently contained in Part VI of CEPA, and should be modeled on the international air pollution provisions in Part V.

Therefore the Committee makes the following recommendation:

The Committee recommends that the federal government amend CEPA to add to Part V provisions authorizing the federal government to prevent transboundary water pollution and to ensure that Canada complies with international agreements relating to transboundary water pollution.

RECOMMENDATION

64

REGULATION OF NUTRIENTS, PRODUCTS OF BIOTECHNOLOGY, AND OTHER SUBSTANCES

NUTRIENTS

Scope of the Nutrient Regulations

Part III of CEPA incorporates sections of the *Canada Water Act* pertaining to nutrients, and prohibits the manufacture, use and sale of cleaning agents that contain a prescribed nutrient in a concentration greater than that permitted by regulation. The only regulations made under this Part, the *Phosphorus Concentration Regulations*, limit the maximum concentration of phosphorus in laundry detergent to 2.2 percent by weight, expressed as elemental phosphorus.

The concentration of phosphates in laundry detergent has been regulated in Canada and the United States since 1972 as a result of concern over the growing problem of eutrophication, especially in the Great Lakes basin.¹ Eutrophication describes the condition of a lake or watercourse where the growth of algae is excessive and may lead to serious degradation of the aquatic ecosystem. Many nutrients that promote algae growth, including nitrogen, phosphorus and potassium, come from natural sources, but many are also found in runoff waters from fertilized agricultural land, wastewater and industrial effluent. Eutrophication has been reduced by the removal of phosphates by water treatment plants. Loadings at point sources have also been dramatically reduced since 1972. However, the concentration of nitrogen compounds has risen in all of the Great Lakes, and is now a cause of growing concern. The increase appears to be due primarily to an increased use of fertilizers.²

Since compliance with CEPA regulations on phosphorus is high, the number of inspections has been reduced. In fact, there was no activity under this part of the Act during 1993-1994.³ The *CEPA Evaluation Report* noted that phosphates enter water from a variety of sources, many of which can be controlled under CEPA.⁴

¹ Environment Canada, *The State of Canada's Environment*, Ottawa, 1991, p. 18-11.

² *Ibid.*, p. 18-12.

³ Environment Canada, *Canadian Environmental Protection Act, Report for the period from April 1993 to March 1994*, p. 30.

⁴ Environment Canada, Evaluation Branch, *CEPA Evaluation, Final Report*, December 1993, p. 69.

Consequently, the *Report* recommended that “consideration be given to whether CEPA should cover sources of phosphate other than laundry detergents”.⁵

In the same vein, Dr. D.W. Schindler of the University of Alberta recommended that CEPA provide for the regulation of nutrient-containing releases, particularly industrial wastewater. For example, pulp and paper mills use nutrients to improve the biological oxygen demand of their effluent, but the nutrient releases themselves are unregulated.⁶

The Committee agrees with these observations and is of the opinion that the phosphate content of cleaning agents other than laundry detergents (dishwashing detergent, for example) should be regulated under Part III of CEPA within one year of the tabling of this Report. Environment Canada should also determine whether regulation is required for nutrients in cleaning agents other than phosphates.

Further, the quality of industrial effluent has traditionally been controlled by the provinces, except for certain toxic substances federally regulated under CEPA. The Committee believes that it would be appropriate to investigate whether point and non-point sources of nutrients are adequately regulated by the provinces. If they are not, the Committee recommends that the federal government take action to broaden the powers of CEPA to enable it to regulate these other nutrient sources.

The Committee recommends that within one year of the tabling of this Report the Department of the Environment regulate the phosphate content of cleaning agents other than laundry detergents under Part III of CEPA. The Committee further recommends that Environment Canada determine whether regulation is required for nutrients in cleaning agents other than phosphates.

RECOMMENDATION
65

The Committee recommends that by December 31, 1996, Environment Canada determine whether sources of nutrients other than cleaning agents are adequately regulated by the provinces and territories, and if they are not, that the powers of Part III be broadened to include these other nutrient sources.

RECOMMENDATION
66

Amending Definition of Nutrients

The Environmental Law Section of the Canadian Bar Association and the Aquatic Ecosystem Health and Management Society both recommended that the definition of “nutrients” as set out in section 49 of CEPA be made less anthropocentric and that it include a reference to ecosystem health. The Committee is recommending in this Report that the ecosystem approach be adopted as one of the guiding principles of CEPA (see Chapter 4). Consequently, the Committee agrees that the definition of “nutrients” should be amended to include a reference to the ecosystem.

⁵ *Ibid.*, p. 75

⁶ Dr. D.W. Schindler, Presentation to the Standing Committee on Environment and Sustainable Development, November 30, 1994, p. 1.

RECOMMENDATION

67

The Committee recommends that the definition of “nutrients” as set out in section 49 be modified as follows:

- i) delete part a), and replace it with “interfere with ecosystem health and functioning”, and
- ii) in part b), delete the phrase “that is useful to human beings”.

PRODUCTS OF BIOTECHNOLOGY

The term “substance” as used in CEPA, encompasses both animate and inanimate matter and includes products of biotechnology. For example, organisms which have been genetically modified using recombinant-DNA (rDNA) technology and naturally occurring micro-organisms are covered under the legislation.⁷ The term “biotechnology” is defined in CEPA as:

*the application of science and engineering in the direct or indirect use of living organisms or parts or products of living organisms in their natural or modified forms.*⁸

Under CEPA, products of biotechnology are included in Part II: Toxic Substances and may be assessed as “new substances”, in much the same way as new chemicals are assessed. Under section 26, new biotechnology products must be assessed before they are manufactured in, or imported into, Canada. If such products are “toxic” under CEPA (as currently written), the Minister of the Environment can impose conditions on their manufacture, use, release or importation.⁹

The economic potential of biotechnology as a “new” technology is considerable. Biotechnology products take many forms and may be alive (animate) or lifeless (inanimate). Some products have the potential to improve the quality of the natural environment. For example,

... soil inoculants are enhancing the utilization of phosphate from fertilizers, reducing environmental contamination and lowering costs to farmers. Bacteria and fungi are being used to treat sites contaminated by toxic chemicals ... These processes are cheap and effective alternatives to removing and incinerating contaminated soils ...

Biotech is also being used to clean up mine tailings and to contain acids that otherwise run off into lakes and rivers. Biotech is being used to develop crops resistant to insect and bacterial attack. These reduce the needs for agricultural pesticides. (65:5)

⁷ Recombinant-DNA (rDNA) technology involves the direct manipulation of genetic material (DNA) and includes the transfer of DNA between different species of organisms to create novel life forms.

⁸ CEPA, section 3(1).

⁹ Canadian Environment Network's Toxics Caucus, The Canadian Environmental Protection Act : An Agenda For Reform, Brief to the Committee, 1994, p. 20.

Currently, most products of biotechnology are regulated under legislation other than CEPA. Biotechnological pesticides (which may include living organisms) are regulated under the *Pest Control Products Act*, transgenic crop varieties produced by rDNA technology are regulated under the *Seeds Act*, and soil inoculants for fertilizer enhancement under the *Fertilizers Act*. All of these Acts are administered by Agriculture and Agri-Food Canada. Pharmaceutical drugs produced as a result of new biotechnological techniques are regulated under the *Food and Drugs Act* administered by Health Canada.

A limited number of biotechnology product regulations under federal legislation have been in place for some time in Canada. Examples include some pesticidal products regulated under the *Pest Control Products Act* and some drug products regulated under the *Food and Drugs Act*. Additional regulations for the products of biotechnology are now being developed in various departments. The federal government publication, *Building a More Innovative Economy*, includes the following initiatives:

- By mid-1995, the Minister of Agriculture and Agri-Food will put in place revised regulations under the *Seeds Act*, *Feeds Act*, *Fertilizers Act*, and *Health of Animals Act*.
- By mid-1995, the Minister of the Environment will issue new regulations under the *Canadian Environmental Protection Act*.
- The Minister of Health will issue new regulations to provide for environmental assessment under the *Food and Drugs Act*, with publication in the *Canada Gazette* by fall 1995.
- Regulations governing novel foods under the *Food and Drugs Act* will be published by the Minister of Health by spring 1995.¹⁰

The federal government is also planning to join with industry and non-governmental organizations to create a forum to consult on the societal implications of biotechnology. In addition, the proclamation of the *Canadian Environmental Assessment Act* has paved the way for the establishment of a mechanism to assess the environmental impacts of projects and processes. That mechanism will apply to biotechnology as well.

Within the federal government, an Interdepartmental Committee on Biotechnology comprised mainly of Assistant Deputy Ministers has been established to facilitate ongoing discussions among the relevant federal departments. Within this committee, there is also a Sub-group on Safety and Regulation. This sub-group is made up of experts in products and processes drawn from the various departments. The chair of the sub-group will rotate between the departments of Health, Agriculture and Agri-Food, and Environment.

None of the witnesses who appeared before the Committee suggested that products of biotechnology should *not* be strictly regulated under federal legislation. There were, however, differing opinions on the role that CEPA should play.

¹⁰ Government of Canada, *Building a More Innovative Economy*, Industry Canada, 1994, p. 30.

The Canadian Environmental Industries Association recommended that “all regulations concerning biotechnology products, regardless of industry sector use, be either consolidated under CEPA or under new legislation specifically drafted for biotechnology”. (44:8)

The Industrial Biotechnology Association took a quite different position, recommending that the *status quo* be maintained. At present, CEPA regulates only those biotechnological products that are *not* regulated under other federal statutes. Thus, biotechnology and the products that derive from biotechnology are regulated under several different Acts. Primary responsibility rests with the department(s) with the traditional expertise and experience related to specific classes of products. (Agriculture and Agri-Food Canada retains responsibility for pest control products, seed and fertilizers, for example.)

A third option, which effectively bridges the conflicting recommendations noted above, was put forward by the Canadian Institute for Environmental Law and Policy (CIELAP). This group's concerns centre on the adequacy of the notification and assessment processes under other existing federal statutes regulating products of biotechnology. The Institute recommends that CEPA set minimum federal assessment requirements that can serve as a reference point for other federal statutes:

If different laws continue to be applied to different biotechnology products, all biotechnology products released into the environment should be evaluated with the same criteria, same standards for public participation and available prevention options as in CEPA.¹¹

CIELAP also made a number of other interesting recommendations about the regulation of biotechnology products.

- All products of biotechnology should be evaluated on the basis of the following six criteria: their direct, indirect, long-term, and cumulative environmental and human health effects, and their impact on biodiversity; their purpose; their efficacy; their biological and ecological characteristics; the availability and effectiveness of monitoring, preventing and treating the waste associated with biotechnology products; and the availability of alternatives to a proposed product.
- The testing of biotechnology products in the open environment should only occur with specific approval of the Minister of the Environment. Any violations of the conditions of the approval should be prosecuted.
- The public should have a greater role in decisions on biotechnology products, including the right to appeal decisions, the right to be informed of tests in their community, and the right to access the information used to evaluate the biotechnology product.

¹¹ *Canadian Environment Network's Toxics Caucus, Canadian Environmental Protection Act: Agenda for Reform*, p. 21.

- CEPA should require the Minister of the Environment to establish a publicly accessible database on all environmental releases of biotechnology products.¹²

CIELAP went on to recommend that in view of the growing importance of biotechnology, a new Part be developed under CEPA to deal with products of biotechnology. The minimum assessment standards already established by an amended CEPA would be retained by the relevant federal departments. CIELAP also recommended that CEPA be amended to require the Governor in Council to publish a list of statutes that are considered to be equivalent to CEPA (revised) in terms of their assessment processes for products of biotechnology.

The Committee supports these recommendations, noting that the definition of biotechnology in CEPA is very broad, and that the products of biotechnology are very diverse. Included are a range of products from specialized pharmaceuticals and medical diagnostic tools to products for environmental use. Therefore, we believe that the notification and assessment standards for biotechnology products should be developed on a scientific basis, and their application should be tailored to particular types, or uses, of products.

The Committee recommends that CEPA be amended to include a new Part to deal specifically with products of biotechnology. This new Part will include minimum notification and assessment standards for *all* products of biotechnology released into the environment, including those regulated under other federal Acts. Other federal statutes shall prevail over CEPA in regard to the environmental impact assessment of products of biotechnology only if their notification, assessment and regulatory standards are at least equivalent to those prescribed under CEPA.

RECOMMENDATION
68

The Committee recommends that CEPA be amended to require the Governor in Council to publish a list of statutes considered to be at least equivalent to CEPA with respect to their assessment process for products of biotechnology.

RECOMMENDATION
69

The Committee notes that these recommendations will apply principally to new products of biotechnology that have not yet reached the marketplace. Products that are already on the market, but are not regulated under other federal statutes, are now covered under the general authority of CEPA. If, therefore, there were a concern that an existing product of biotechnology might be causing harm to the environment or to human health, it could be assessed under CEPA.

Biotechnology and the products derived from it form the basis of an emerging Canadian industry. With CEPA and other federal statutes there is an opportunity for the Canadian government to play a proactive role in its future development. There is no need to wait for problems to develop.

¹² *Ibid.*

OTHER SUBSTANCES

Fuels and Motor Vehicle Emissions

The production, import and use of fuels and fuel additives are regulated in CEPA under sections 46 and 47. CEPA does not, at present, regulate the export of fuels.

This Report considers three aspects of the fuels issue. The first is the suggestion that the existing sections on fuels in CEPA need to be strengthened. The second issue concerns motor vehicle emissions, which are currently regulated under the *Motor Vehicle Safety Act* (MVSA), administered by Transport Canada. The third issue concerns the potential health and environmental effects of fuels exported from Canada. The three issues are closely linked and are therefore considered together.

Motor vehicles manufactured in Canada are built according to a North American product standard, partly to ensure that all vehicles share the best emission control technologies available. It follows that fuels and fuel additives must be compatible with those emission control technologies.

The principal witness on this issue was the Motor Vehicle Manufacturers' Association (MVMA). The relationship between emission controls, technologies and fuels was an important part of its submission to the Committee:

... MVMA member companies have been moving voluntarily in Canada to adopt the U.S. federal motor vehicle emission standards, which are the most stringent national standards in the world. Memoranda of Understanding signed with Transport Canada already exist for light-duty vehicles for model years 1994 and 1995, and heavy-duty vehicles for model years 1995 through 1997. For reasons previously stated, our members must necessarily build to one level of product standard for North America, as it reduces plant complexity and parts proliferation while ensuring lock-step progress with advancements in leading-edge emission control technology . . .

Sections 46 and 47 (of CEPA) must be strengthened to ensure that fuel formulations can be regulated if it is determined that a fuel, or fuel additive, impairs the proper operation and performance of vehicle emission control systems. (40:31)

A contentious issue for the Motor Vehicle Manufacturers' Association is the matter of an octane enhancer known as MMT — a manganese-based additive. MMT is used only in Canadian gasoline. The MVMA claims that MMT will impair the operation of the latest, and most effective, emission control devices and that unless MMT is removed from Canadian gasoline, vehicle manufacturers may not be able to install the best available technology in vehicles sold in Canada. Fuel manufacturers contend that MMT is effective as an octane enhancer, safe for the environment and health, and that

it will not impair emission control systems.¹³

The dispute between the vehicle manufacturers and the fuel producers is an important one and is being dealt with by Environment Canada. On 19 May, 1995 the Minister of the Environment introduced the *Manganese Based Fuel Additives Act* to prohibit the interprovincial trade and import, for commercial purposes, of MMT and gasoline containing MMT.¹⁴

The Committee agrees with the position taken by the MVMA that CEPA is not adequate to deal with the MMT question, and that sections 46 and 47 are indeed inadequate to permit the Minister to ban a gasoline additive in order to protect the environment.

Section 47 of CEPA states, in part:

47. The Governor in Council may, for the purposes of section 46, make regulations (a) prescribing with respect to any fuel or fuel used for any purpose, the concentration or quantity of any element, component or additive that, in the opinion of the Governor in Council, if exceeded, would, on the combustion of the fuel in ordinary circumstances, result in a significant contribution to air pollution.

Part of the problem with this section is the need to demonstrate “a significant contribution to air pollution”. This is extremely difficult to prove because the science of monitoring air quality is not always capable of linking effects with specific causes. Deleting the word “significant” from this section will help to solve this problem. A second problem, in the Committee’s opinion, is the reference to “combustion”. Petroleum-based fuels are intrinsically polluting, whether combusted or not. This situation must be remedied and we believe it can be done by adhering to the *precautionary principle* and the *weight of evidence* approach to environmental protection. Changing “would” to “may” in this section is consistent with the precautionary approach. The Committee wishes to make it clear however, that the issue here has to do with the adequacy of the legislation, *not* the question of the acceptability of MMT.

The Committee recommends that Sections 46 and 47 of CEPA be reviewed and amended to empower the Minister to make regulations in respect of fuels and fuel additives quickly and efficiently, based on a weight of evidence approach.

RECOMMENDATION
70

The Committee further recommends that the reference to “combustion” in section 47 of CEPA be removed, that the word “significant” be deleted and that “would” be changed to “may”, so that the section will read, in part: “a) prescribing, with respect to any fuel or fuel used for any purpose, the concentration or quantity of any element, component or additive that, in the

RECOMMENDATION
71

¹³ “DOE to Draft Legislative Options on MMT Additive”, *Eco-Log Week*, February 24, 1995, p. 2.

¹⁴ Environment Canada, “Federal Government Tables MMT Legislation”, *News Release*, 19 May 1995.

opinion of the Governor in Council, if exceeded, may in ordinary circumstances, result in a contribution to air pollution”.

The Committee reiterates its concern about the essential polluting properties of petroleum-based fuels, both before and after their combustion. The movement away from polluting energy sources toward a goal of cleaner fuels and technologies has this Committee's full support.

At present, Transport Canada has authority for the control of vehicle emissions under the *Motor Vehicle Safety Act* (MVSA), based on Memoranda of Understanding between the department and motor vehicle manufacturers. Late in 1995, however, it is anticipated that formal regulations setting standards for vehicle emissions will be promulgated under the MVSA.

Environmental policy and targets for air pollution control are set by Environment Canada. The question therefore arises as to whether a transfer of authority for vehicle emissions to Environment Canada and CEPA, would result in a more efficient system. The important issue is the quality of environmental protection that may be achieved. As long ago as 1981, the House of Commons Subcommittee on Acid Rain recommended that the authority for vehicle emissions be transferred to Environment Canada. In this context, Transport Canada (in January 1995).

... recently agreed with the Department of the Environment to examine all the alternatives for looking at different mechanisms for regulating (motor) vehicle emissions. This could be an agreement between the two departments sharing responsibility; it could be a separate vehicle emissions act, separate altogether from CEPA; or it could be CEPA, as (has been) suggested. (70:101)

The Committee supports the view that the authority for fuels, additives and vehicle emissions should be consolidated under a single federal Act and administered by one department. On balance, and because these are essentially environmental issues, the Committee further contends that such authority should lie with Environment Canada under CEPA.

RECOMMENDATION

72

The Committee recommends that legislative authority for vehicle emissions be transferred from the *Motor Vehicle Safety Act* and Transport Canada, to the *Canadian Environmental Protection Act* and Environment Canada, thus consolidating authority for fuels, fuel additives and vehicle emissions under a single federal Act.

Finally, CEPA does not currently have any jurisdiction over the fuels exported from Canada and their environmental and health effects in other countries. The Committee shares the view that Canadian products destined for export should meet the same environmental and health standards as those applied within Canada.

RECOMMENDATION

73

The Committee recommends that CEPA be amended to ensure that the same health and environmental standards for fuels and fuel additives that are applied

in Canada are applied to fuels and fuel additives destined for export to other countries.

Lead Sinkers and Lead Shot

Waterfowl and other birds occasionally ingest spent lead shot used in wetland hunting and some consume lost fishing sinkers containing lead during their normal feeding activity. Such items can be toxic to birds and can cause death, although it is possible for some birds to recover from lead poisoning.

The problem of waterfowl poisoning resulting from the ingestion of lead shot in wetland hunting has been recognized since the turn of the century. Concerted research and monitoring efforts to study this issue were not initiated in Canada until the late 1980s when the United States announced its intent to ban entirely the use of lead shot for waterfowl hunting by 1991. Since then, regulations to control the use of lead shot have been implemented under the *Migratory Birds Convention Act* administered by Environment Canada, with the cooperation of the provinces. Beginning in 1990, non-toxic shot zones were designated in some parts of the country. Most of these areas (zones) were already known to face lead poisoning problems and the use of lead shot was therefore banned altogether in these areas.

Recent documentation confirms that the problem is not confined to waterfowl, and that secondary poisoning of raptors and eagles also occurs. Since the original non-toxic zoning approach was adopted, there has been international action to control the use of lead shot as well as advocacy by environmental NGOs within Canada to ban its use. Norway, Denmark and the Netherlands have also taken action to ban the use of lead shot. Environment Canada is currently reviewing its policy that restricts the use of lead shot in wetland hunting in discrete areas only.

Lead poisoning of upland game is also of concern. Humans may become poisoned through inadvertent ingestion of pellets or from tissue that contains biologically incorporated lead. Aboriginal peoples remain at particular risk, both because of the use of traditional curing techniques before cleaning birds which allows lead to be absorbed from the pellets into the surrounding flesh, and because wild game represents a significant part of their diet.

There is recent evidence that loons are being poisoned as a result of ingesting lead fishing sinkers. Data from Canada, the United States, Great Britain and elsewhere indicate that lead intoxication of loons, swans and other waterbirds from the ingestion of fishing sinkers is a widespread phenomenon. In Britain, the use of lead sinkers has been banned since 1987 due to mortality of swans in that country. In the United States, the Environmental Protection Agency has proposed to prohibit the manufacture, processing and commercial sale of lead sinkers of a size range most likely to be ingested by waterbirds. Currently no jurisdictions in Canada have regulated the use of fishing sinkers, although non-toxic products are available.

Several witnesses urged the Committee to recommend a ban on the use of lead shot and fishing sinkers in Canada. In his submission to the Committee at the Forum on the Status of Wildlife in Canada, Dr. Vernon G. Thomas noted:

Science has defined adequately the scope of this toxic problem. Technology and industry have provided a wide array of non-toxic substitutes for shot and sinkers which are readily available to Canadians. International precedents on the banning of lead exist which Canada could follow.¹⁵

The *Migratory Birds Convention Act* has no authority over the use of fishing sinkers or the use of lead shot in upland game bird hunting and target shooting. Regulation of these uses could be effected under provincial hunting and firearm regulations. The Committee notes, however, that lead is a listed toxic substance under CEPA and that CEPA could therefore be employed to regulate lead shot and sinkers.

The Committee recognizes that lead shot and sinkers have a long tradition of unrestricted use, and are well-liked by those who use them. However, in the light of what is now known about the rates of environmental deposition of lead shot and fishing sinkers and their effects on the environment and wildlife, we believe that if these products were just now being developed, it is doubtful that they would be approved for sale or use without severe restrictions. Since there are several high-quality, non-toxic alternatives to lead shot and fishing sinkers, the Committee recommends that these lead products be restricted or banned altogether.

A ban on lead shot for all hunting, not only wetland hunting, is appropriate for several reasons. As noted above, there are human health concerns associated with ingesting upland game that contains biologically incorporated lead. Enforcement issues also necessitate that lead shot be banned for all hunting. Enforcement resources are already severely strained and adequate policing of non-toxic zones is difficult. There is also the added problem of properly identifying non-toxic shot. A total ban would also create a larger market for non-toxic shot and should help to lower the price of steel and bismuth shot.

RECOMMENDATION

74

The Committee recommends that the Minister of the Environment take regulatory action under CEPA with the goal of eliminating by May 31, 1997, the import, sale, manufacture, and use of lead shot in Canada.

RECOMMENDATION

75

The Committee recommends that the Minister of the Environment initiate regulatory action under CEPA to prohibit by May 31, 1997, the import, sale, manufacture, and use of lead sinkers and jigs that are less than or equal to 2.5 cm in all dimensions.

Radioactive Substances

"Substance" as defined in section 3 of CEPA does not include any reference to radioactive materials. Therefore, the Act does not now regulate radioactive substances.

¹⁵ Vernon G. Thomas, The Lead Shot and Sinker Issue in Canada, Brief to the Committee, April 26, 1995, p. II.

In fact, there is only one reference to radioactive materials in CEPA. The *List of Prohibited Substances* under the ocean dumping provisions in Part VI includes “high-level radioactive wastes or other high-level radioactive matter”. This provision conforms with Canada’s obligations under the London Convention, 1972.

In Canada, the nuclear sector falls exclusively under federal jurisdiction. The *Atomic Energy Control Act* (AECA), passed in 1946, applies to all nuclear facilities and nuclear materials. The Atomic Energy Control Board (AECB), an independent agency established under the Act, exercises significant administrative and regulatory powers. Regulations adopted by the Board include: the *Atomic Energy Control Regulations*, the *Physical Security Regulations*, the *Uranium and Thorium Mining Regulations*, and the *Transport Packaging of Radioactive Materials Regulations*.

A licence issued by the AECB must be obtained for such activities as the construction and start-up of generating stations, as well as the manufacture and use of radioactive materials.

The *Atomic Energy Control Regulations* are intended to ensure protection against the effects of ionizing radiation resulting from the use of “prescribed substances” under the *Atomic Energy Control Act* and, among other things, set out the dose limits for ionizing radiation and exposure to radon decay products. Prescribed substances include uranium, deuterium, thorium, plutonium, neptunium, their derivatives, and any other substance designated by regulation as potentially radioactive or employed in the production, use or application of atomic energy.

In Canada exposure standards for radioactive substances are based on the findings, recommendations and standards of the International Commission on Radiological Protection (ICRP). The studies and publications of two other scientific organizations — the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), and the International Atomic Energy Agency (IAEC) — are also used in this connection.

Regulation of radioactive substances is based on a process of health-risk assessment. This process is now under review and the *Atomic Energy Control Act* and its associated regulations are being revised. The new legislation will provide for stricter dose limits based on the 1990 ICRP recommendations, replacing those specified in 1977.

Licensees in Canada must comply with specific licence conditions as well as with the AECA and the various other regulations. These licence conditions are legally binding and include the requirement to apply the ALARA principle, (i.e., to keep any dose “as low as reasonably achievable”, taking into account social and economic factors). In practice, licensees have tended to adopt radiation dose limits for their operations that are well below the legal limits. In some cases the levels are set in consultation with labour unions — as with Ontario Hydro, which works cooperatively with the Power Workers Union.

The provinces regulate the presence of certain radionuclides in drinking water. Some provincial laws also address other aspects of the radioactive materials issue. For example, Manitoba prohibits the storage of nuclear waste anywhere in the province.

In the course of its public hearings, the Committee received a significant, although limited, amount of testimony and evidence on the issue of radioactive materials in the environment and their possible effects on human health and the ecosystem.

Dr. Schindler of the University of Alberta suggested that a number of radioactive substances could be considered to be bioaccumulative, toxic substances. Radium, for example, can reside in bone tissue for months, even years.¹⁶ Dr. Schindler also stated that many metallic radionuclides, including transuranic elements, become greatly concentrated in lake sediments. The examples he cited in his testimony included plutonium, and isotopes of zinc, cesium, cobalt, mercury, lead, and other metals.¹⁷

Norman Rubin of the Energy Probe Foundation criticized CEPA for failing to protect the environment and human health from emissions of toxic substances that are radioactive, and described the current situation as “a regulatory vacuum on the environmental side as far as emissions of radionuclides and radioactive poisons are concerned”. (45:92) Mr. Rubin further stated that,

... releases of toxic chemicals that are radioactive in Canada, and exposures to them, are (currently) permitted at levels that cause risks that are typically several hundreds or thousands of times higher than the risks that would be allowed from similar emissions if those emissions were not radioactive. (45:92)

Mr. Rubin also alleged that the federal government is applying a “double standard” with regard to the risks posed by radioactive toxic substances, compared to non-radioactive toxic substances. In his opinion, this alleged discrepancy in the regulation (and possible mitigation) of the environmental and health risks posed by radioactive substances stems from the “very clear pressure from the radioactivity-polluting industries, which ... are very well positioned at the right hand of federal and provincial governments”. (45:93)

In its seventh biennial report, the International Joint Commission (IJC) recommends that:

¹⁶ D.W. Schindler, University of Alberta, Brief to the Committee, November 30, 1994, p. 1.

¹⁷ *Ibid.* A “transuranic element” is one whose atomic number is greater than that of uranium, which is 92. Only a few elements have a higher atomic number than uranium: for example, plutonium’s atomic number is 94, while that for lead is 82.

Governments incorporate those radionuclides which meet the definition of persistent toxic substance in their strategy for virtual elimination.¹⁸

In its response to the IJC's seventh biennial report, the federal government declined to accept this recommendation.¹⁹ In summary, the government stated that the Regulations and Licence Conditions established by the AECS prohibit the release of toxic amounts of radionuclides into the environment and that actual emissions from licensed facilities are lower than 1 percent of the regulatory dose limit. In addition, the established dose limits have been selected to protect the public health. The government also considers the dose limits to be low enough to protect the environment at large.

The government's response notes that Canada's approach to radiation protection is in keeping with recommendations developed by the ICRP and that acceptance of the IJC recommendation "would lead Canada to decisions that are outside internationally accepted practices". Also, the large natural radioactivity component in the environment makes a virtual elimination strategy difficult to apply: most of the long-lived radionuclides detected in the Great Lakes Basin are from natural sources.

The government claims that criteria such as persistence, bioaccumulation and toxicity endpoints, although appropriate for toxic organic chemicals, are not needed for radionuclides because the effects of radiation on human health are well known, while the effects of toxic organic chemicals frequently are not. Moreover, the government response states, "there is no evidence that current radionuclide levels in the Great Lakes have resulted in detrimental effects to biota". Most radionuclides do not move up the food chain in the same manner as do toxic organic chemicals and, although some can accumulate in specific biota, the levels in Great Lakes fish, for example, are barely detectable.

The government's response to the IJC recommendation concludes by stating:

... the average radiation exposure to Great Lakes residents from all fuel cycle and other industrial activities is a negligible fraction of natural background exposure and is orders of magnitude below any level where either acute or chronic effects could be observed. There is no evidence of damage to other biological species at radiation levels found in the Great Lakes Basin.²⁰

The Canadian Nuclear Association testified on the question of the possible harmful effects of radiation, focusing specifically on low levels of radiation:

In the case of setting ... limits for exposure to radiation, the effects of low levels of radiation are not based on observable data. This was a problem the nuclear industry faced at the outset. There was then, and there is now, no

¹⁸ International Joint Commission, *Seventh Biennial Report on Great Lakes Water Quality*, 1994, Recommendation No. 12, p. 47.

¹⁹ Government of Canada, *Canada's Response to the Recommendations in the Seventh Biennial Report of the International Joint Commission*, October 1994, p. 17-18.

²⁰ *Ibid.*, p. 18.

specific indication that there are harmful effects at the low levels of radiation typically associated with the operation of uranium mining and power generation facilities. The only reliable evidence is with respect to observed effects at high levels of exposure. The effects of low levels have (been) extrapolated linearly from those at high levels to give a credible measure on which a judgement can be based that the benefits outweigh the possible maximum detriment. (66:9)

The Committee believes that the point to note in this statement is that the health effects said to be caused by low levels of radiation are theoretical, rather than observed. This does not mean, however, that low radiation levels have no effect. We therefore believe that a prudent regulatory policy would keep emitted radiation levels as low as possible.

Atomic Energy of Canada Limited (AECL) also testified before the Committee and made the following statements with respect to the regulation of the nuclear industry in Canada:

. . . radioactive substances are fundamentally different in nature from chemically hazardous substances. Radiation can be detected and measured with precision at extremely low levels. This common property of radioactive materials provides the basis for regulating, in a holistic manner, emissions of all radioactive substances and all possible routes of exposure . . .

The international accumulation of knowledge over fifty years has led to the setting of precise limits and standards that are shared globally. This has been, in our view, very effective . . . AECL therefore concludes that the regulatory and legal framework governing radioactive substances is extensive and effective. (71:37)

The contrasting opinions we have received on the environmental and human-health implications of radioactive substances reflect the tenor of the debate that has gone on in Canada for many years. The issue before the Committee at this time is to consider the proposition put forward by both Dr. Schindler and Mr. Rubin, that radioactive substances should be regulated under CEPA in the same way as are chemicals and other substances.

Several suggestions have been made to bring radioactive substances under the purview of CEPA. It is arguable that the definition of “substance” as set out in section 3 of CEPA, and which contains the words “any element”, can be interpreted to include radioactive isotopes or radionuclides. The definition could be strengthened, in respect of radioactive substances, however, by rewording subsection 3(1) of CEPA to read:

*(b) any element, **radioactive isotope**, or free radical,*

It is also arguable that there is not a legal impediment in CEPA to assess a radioactive substance and to declare it to be “toxic” under the current definition of “substance” in CEPA. The difficulty that may arise is in subsection 34(3) of CEPA, which states, in part, that CEPA may not regulate a substance if:

the regulation regulates an aspect of the substance that is regulated by or under any other Act of Parliament.

In the case of radioactive substances, the authority of the *Atomic Energy Control Act* (AECA) is a critical consideration.

As noted earlier, the Atomic Energy Control Board (AECB), administers the AECA. In 1994, the Auditor General of Canada released a report on the AECB²¹ which focused on the following points: AECB's legislative base; the regulatory framework; regulatory approaches to compliance and enforcement; management of interfaces with other jurisdictions; strategic planning, roles and responsibilities; human resource requirements; program evaluation and internal audit; and reporting mechanisms. The Auditor General did not audit the scientific and engineering review activities or the assessment functions of the AECB.²²

The main points in the audit are summarized below:

- The AECB provides Canadians with assurance that the nuclear industry operates in a safe manner. Independent studies have provided additional assurance that the nuclear power reactors are being operated safely.
- In the past decade, the setting in which the AECB regulates the nuclear industry has undergone major changes, presenting significant and difficult challenges to the regulation of nuclear power in Canada.
- New legislation by itself will not correct the deficiencies identified in the AECB's management processes and practices. The audit found that the AECB was not fully meeting its obligations as a regulatory body. Although almost all the licensees and other stakeholders contacted during the audit expressed a high degree of respect for the technical competence of AECB staff, the Report stated that significant improvements were needed in a number of key management processes and practices.
- The audit found that the AECB needed a clearly documented regulatory strategy, a strategic plan, better documentation of its regulatory requirements, and development of criteria for assessing compliance. In addition, the audit concluded that the management of compliance inspection and enforcement activities related to prescribed substances and radioisotopes needed to be strengthened significantly.
- Finally, the audit noted that in these changing and difficult times, even greater vigilance is needed if the AECB is to continue to provide assurance that the industry remains safe. In the opinion of the Auditor General, without updated

²¹ Auditor General of Canada, *Report of the Auditor General of Canada to the House of Commons*, 1994, Volume 10, Chapter 15, "Atomic Energy Control Board, Canada's Nuclear Regulator", p. 170

²² *Ibid.*, p. 15-10.

legislation and improvement in its management processes and practices, the AECB will be hindered in its ability to provide such assurance.²³

The Committee acknowledges that there is significant concern about the effectiveness of the current regulatory regime for radioactive substances and that, at the very least, Environment Canada should consider the feasibility of regulating radioactive substances under CEPA in the same manner that chemical and other substances are now regulated. Such consideration must necessarily include an assessment of the current regulatory regime for such substances in Canada and the capability of Environment Canada, in the light of the department's recent downsizing, to assume the additional regulatory responsibility.

RECOMMENDATION
76

The Committee recommends that Environment Canada study the feasibility and desirability of regulating radioactive substances under the *Canadian Environmental Protection Act* and report back to the Committee within three years of the tabling of this Report.

Regulating Dioxins and Furans in Ambient Air

Polychlorinated dibenzodioxins ("dioxins") and polychlorinated dibenzofurans ("furans") are highly persistent, bioaccumulative, chlorinated chemicals which are found in all environmental media but which have a strong affinity for sediments. There are 210 dioxins and furans, each with a chlorine atom content of molecules ranging from one ("monochloro") to eight ("octachloro"). The various kinds of dioxin, called "isomers" or "congeners", display a range of "toxicity equivalency factors", from 1 (most toxic) to 0.001 (least toxic); for furans, the range is from 0.5 to 0.001. The most toxic dioxin contains four chlorine atoms in its molecule and is known as "2,3,7,8-tetrachlorodibenzodioxin", or "2,3,7,8-TCDD". It is a proven and very potent carcinogen and may also have other serious health effects on human and animal populations.

All life is exposed to dioxins and furans to some degree, and all humans and animals carry some level of dioxin and furan in their tissues. There is a growing body of scientific opinion that the dioxin burden, especially, in humans and wildlife is an issue of concern:

*the accumulation of dioxins in humans may already be approaching the levels where negative effects may be experienced, suggesting that no new sources of dioxin can be tolerated.*²⁴

Dioxins and furans enter the Canadian environment from a number of sources: the most significant being municipal and hospital incinerators, and the steel industry. Most of these dioxins and furans originate in the United States and are being deposited as air

²³ *Ibid*, p. 15-5.

²⁴ Paul Muldoon, Canadian Environmental Law Association, "Study Shows Dioxin Fallout Dusting All of Ontario", *Media Release*, May 18, 1995.

contaminants into the Great Lakes and across Canada, generally. Airborne dioxins and furans can travel as far as 1,500 kilometres from their source.

Although there are *National Ambient Air Quality Objectives* for a number of common air pollutants in Canada, there is no equivalent for dioxins or furans. The Committee believes that these should be established.

The Committee recommends that the Minister of Environment Canada establish National Ambient Air Quality Objectives for dioxins and furans.

RECOMMENDATION**77**

In 1989, The Canadian Council of Ministers of the Environment produced operating and emission guidelines for incinerators. The guidelines were developed by a federal-provincial committee. Also, Environment Canada has a National Incinerator Testing and Evaluation Program (NITEP) which “has demonstrated that (dioxin and furan) emissions from even the oldest incinerators can be controlled to acceptable levels, provided correct management practices and modern control technologies are applied.”²⁵ The Government of Ontario has promulgated regulations for municipal incinerators in the province.

Dioxins and furans have already been designated as “toxic” under CEPA following an assessment of their presence in effluents from pulp and paper mills. Both are on the list of Toxic Substances in Schedule I. At present, dioxins and furans are regulated under CEPA in pulp and paper mill effluents. The Committee believes that there should also be regulations under CEPA controlling the emissions of dioxins and furans into the air from incinerators and other significant sources.

The Committee recommends that the Minister of the Environment promulgate regulations under CEPA controlling the emissions of dioxins and furans from incinerators and from other significant sources in Canada through the use of the best available control technologies.

RECOMMENDATION**78**

It is estimated that more than 90 percent of the dioxins and furans in ambient air in Ontario, and elsewhere in Canada, originate in the United States,²⁶ mainly from incinerators and industry. For example, the dioxin levels in ambient air in Windsor are 10 times higher than those in Toronto, probably due to the operations of the municipal incinerator in Detroit.

In March 1991, Canada and the United States signed an Air Quality Accord.²⁷ Under the terms of that accord, “Canada and the United States pledge to control air pollution

²⁵ Government of Canada, *Canadian Environmental Protection Act, Priority Assessment List Assessment Report No. 1, Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans*, 1990, p. 11.

²⁶ Ontario Ministry of Environment and Energy, Personal communication, May 1995.

²⁷ *The Agreement between the Government of Canada and the Government of the United States of America on Air Quality (the Air Quality Accord)*, March 13, 1991.

that flows across the international boundary”.²⁸ The Committee believes that the Government of Canada should invoke the terms of the Air Quality Accord and pursue negotiations with the Government of the United States to achieve a reduction in air emissions of dioxins and furans from American sources.

RECOMMENDATION
79

The Committee recommends that the Government of Canada pursue negotiations with the Government of the United States under the terms of the Canada-United States *Air Quality Accord* to reduce dioxin and furan emissions from all relevant sources in the United States which may affect the Canadian environment.

Contaminated Sites

Contaminated sites represent one of Canada's most pressing unresolved legacies of environmental mismanagement. Such sites can cause serious environmental damage and can threaten ecosystems and human health, by leaching toxic substances into the water table, for example. The fact that Canada has not yet resolved a clear legal liability regime for such sites is also generating mounting economic costs. In *Creating Opportunity*, for example, the Liberal Party observed that “the unpredictable allocation of financial costs for contaminated sites has led to a climate of instability for both borrowers and lenders. Environmental liability concerns have begun to affect the functioning of capital markets.”²⁹

In 1989, the CCME approved \$250 million for the National Contaminated Sites Remediation Program (NCSRP) to start to address these problems. The 1995 Report of the Auditor General of Canada observed, however, that when funding for this joint federal-provincial program ended on March 31, 1995, much remained to be done. No national inventory of contaminated sites exists. As the Auditor General observed, comprehensive and consistent information on the number and characteristics of contaminated sites “is essential for estimating clean up costs and planning action on high risk sites.”³⁰ Only 11 of the 48 high risk sites identified for remediation under the Program have been fully remediated under federal-provincial agreements. And there is no national plan to clean up the remaining contaminated sites that pose a risk to human health and the environment.

The Committee believes that the federal government must take two initiatives to resolve this problem. First, it must deal with sites for which it has responsibility. The NCSRP identified approximately 1,200 potentially contaminated federal sites. As of March 31, 1995, Environment Canada had approved funding for the remediation of 18

²⁸ Environment Canada, *The Air Quality Accord*, Canada's Green Plan, (1991), p. 1.

²⁹ The Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, p. 67.

³⁰ Auditor General of Canada, Report of the Auditor General to the House of Commons, Forward and Main Points, May 1995, p. 8.

“orphan” sites.³¹ There are, however, no funds left under the Program, and the Auditor General estimates that the potential clean-up for the remaining federal sites is probably in excess of \$2 billion.³²

The Committee recognizes that the government is taking some action to try to identify the extent of this problem and to remediate the worst situations, and that the cost of further remediation could be extremely high. Nonetheless, the Committee believes that continued federal action in this area is required, both to alleviate the direct environmental threat posed by some federal contaminated sites and to provide leadership for private sector initiatives (Chapter 11 discusses the Committee’s recommendations concerning federal stewardship in more detail).

Second, the Committee believes that the federal government should demonstrate leadership in resolving the broader question of developing a nationally consistent and comprehensive liability regime for contaminated sites. The resolution of legal liability for contaminated sites on private property is not a matter solely within the federal jurisdiction and will require interjurisdictional coordination. Some provinces, such as Ontario, have recently taken important measures to address the issue. Nonetheless, the Committee believes that a coordinated, national response is required.

The Committee agrees with the recommendation by the Auditor General that such a response must be based on the polluter-pays principle. As *Creating Opportunity* states, “a solution must be sought that does not burden parties who exercise due diligence with undue liability, but continues to hold accountable parties responsible for environmental damage.”³³

The Committee recommends that by June 30, 1998;

RECOMMENDATION
80

- a) **Environment Canada establish an inventory containing comprehensive and consistent information on the number and characteristics of all federal contaminated sites;**
- b) **the federal government complete an action plan and schedule for the clean-up of all high risk federal contaminated sites;**
- c) **Environment Canada, in cooperation with the provincial and territorial governments, complete a national inventory containing comprehensive and consistent information on the number and characteristics of all contaminated sites in Canada; and**
- d) **Environment Canada, in cooperation with the provincial and territorial governments, resolve the present situation of uncertain legal liability for**

³¹ Orphan sites are sites for which parties responsible for the contamination cannot be identified, or are unwilling or financially unable to carry out the clean up. Federal orphan sites are sites where a party other than a federal department or agency is responsible for the contamination of federal land, but is unknown, unwilling or financially unable to carry out the clean-up.

³² Auditor General of Canada, Report of the Auditor General of Canada to the House of Commons, Chapter 2, Environment Canada: Managing the Legacy of Hazardous Wastes, May 1995, p. 2-13.

³³ *Creating Opportunity*, p. 67.

contaminated sites. Any such resolution should be based on the polluter pays principle.

Mercury Contamination in the Water Systems of James Bay

In its brief to the Committee, the Grand Council of the Crees (of Quebec) described the problem of mercury contamination of fish stocks in the watersheds affected by Hydro-Quebec's hydroelectric dams. According to the Cree, this contamination has resulted in the demise of their traditional fishery in many rivers and has put the health of their people at risk.³⁴

The Committee was advised that the land around James Bay has naturally high mercury levels. Mercury in its natural state is transformed into methylmercury by the microbial activity that accompanies the decomposition of organic matter. When land is flooded to create a reservoir, there is an increase in the transformation and transfer of mercury into the aquatic environment through the bacterial decomposition of the material that has been inundated with water. The methylmercury thus created is then absorbed by aquatic wildlife.³⁵

Although CEPA regulates atmospheric releases of mercury from chlor-alkali mercury plants, it does not regulate the amount of methylmercury, which can be released into the aquatic environment as a result of the creation of reservoirs. The Committee recognizes that mercury contamination from the creation of reservoirs is an important environmental and public health issue. Because this type of contamination is not the type of human-generated contamination that is usually regulated under CEPA, the Committee believes that this matter should be studied to determine whether it would be appropriate to regulate methylmercury under the Act.

RECOMMENDATION
81

The Committee recommends that Environment Canada conduct an in-depth study to determine whether methylmercury released into the aquatic environment as a result of the creation of reservoirs should be regulated under CEPA.

³⁴ Grand Council of the Crees (of Quebec) and the Cree Regional Authority, Brief to the Committee, November 1994, p. 13.

³⁵ Letter to the Chairman of the Committee from Armand Couture, President and CEO of Hydro-Quebec, December 8, 1994.

INTERNATIONAL COMMITMENTS

This chapter examines the role of the *Canadian Environmental Protection Act* (CEPA) in enabling Canada to fulfill its international obligations in respect of the environment. The Brundtland Commission in 1987 and *Agenda 21* in 1992, recognized the need to have an internationally integrated set of environmental, economic and social development policy objectives. This need is characterized by a growing awareness that ecosystems and environmental effects seldom respect national boundaries and that global economic interdependence continues to spread. Regional transboundary issues being addressed within global and regional environmental protection regimes now include acid rain, smog, air contaminants and hazardous waste. Global issues being addressed include world climate, stratospheric ozone, oceans, biodiversity and Antarctica.

Ratification of an international agreement does not immediately transform the agreement into domestic law. Legislative and regulatory changes are often required. Moreover, although the federal government has the authority to enter into international agreements, the incorporation of such treaty obligations into domestic law can be accomplished only through the level of government that has jurisdiction over the subject matter of the obligation. When the subject matter of an international agreement falls within provincial jurisdiction, provincial action is therefore required to make the agreement applicable in Canada.

The preamble to CEPA states clearly that Canada intends to fulfill its international obligations in respect of the environment. Indeed, CEPA is one of the statutes which enables Canada to meet its international environmental obligations. Other statutes, including the *Fisheries Act*, the *Migratory Birds Convention Act*, the *International Boundary Waters Treaty Act*, the *International River Improvements Act*, and the *Arctic Waters Pollution Prevention Act*, also serve as vehicles for this purpose.

CEPA currently provides the legislative authority for Canada to implement international environmental agreements in three areas.

First, Part II enables Canada to fulfill certain international obligations concerning toxic substances. Part II includes specific provisions which enabled the enactment of the *Export and Import of Hazardous Wastes Regulations* in November, 1992, thereby implementing the Basel Convention and other international agreements on the transboundary movement of hazardous wastes. Through its enabling provisions on toxic substances CEPA also provides the vehicle to implement the provisions of those

international agreements that regulate matters fitting the CEPA definition of toxic substances. To date, these enabling provisions have been used to implement the prohibitions and limitations of the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer, and its 1990 London amendments.

Second, Part V includes general enabling provisions for the implementation of international air pollution obligations. Part V has not yet been used.

Third, Part VI implements parts of the London Convention, 1972.

CEPA also contains a number of general enabling provisions that satisfy other international procedural requirements. These include reporting on Canada's implementation of international environmental obligations, establishing air quality and emission inventories, reporting on the state of the environment through international bodies, and other similar requirements.

International Air Pollution

As noted above, Part V of CEPA contains general provisions which enable the implementation of Canada's international air pollution obligations. Prior to making a recommendation to the Governor in Council on a regulation, the Minister of Environment must be satisfied that, for sources other than federal works or undertakings, the province (or provinces) in which the entity to be regulated is located is (are) either not able or unwilling to make the required regulations.

Because both the federal and provincial governments have jurisdiction over several areas relevant to air pollution originating in Canada, both levels of government often must work together to devise processes and mechanisms that meet Canada's international air pollution obligations. In November 1993, federal, provincial and territorial environment and energy ministers approved a Comprehensive Air Quality Management Framework for Canada. This framework provides a formal basis for all jurisdictions to coordinate actions on air quality issues — whether regional, national or international — especially those with transboundary or global effects.

Since CEPA was proclaimed in June 1988, Canada has, with the support of the provinces, endorsed several international clean air agreements, including the Canada-U.S. Air Quality Agreement, the Climate Change Convention, amendments to the Montreal Protocol on Ozone Depleting Substances, and the United Nations Economic Commission for Europe Long Range Transboundary Air Pollution Convention. The 1992-93 CEPA Annual Report concluded that Part V had not been utilized to date because the provinces had responded effectively. Nevertheless, the conditions which must be met before Part V can be utilized are considered by some to be a barrier. The World Wildlife Fund, for example recommended "taking out the obligation in Part V to first seek provincial approval, because we feel international air pollution is a federal jurisdiction". (45:110) Other witnesses disagreed. The Mining

Association of Canada, for example, noted that "the federal government should not encroach on provincial jurisdiction under the guise of international requirements".¹

The Committee recognizes that coordination and cooperation between the federal, provincial and territorial governments in the development and implementation of international clean air agreements is a necessary requirement in a federal state such as Canada. The Committee also believes that removing the conditions requiring consultation with the provinces before enacting regulations related to international air pollution would be inconsistent with the principles of cooperation agreed to by federal, provincial and territorial environment and energy ministers in the Comprehensive Air Quality Management Framework for Canada in November 1993. The Committee is, nevertheless, of the opinion that Part V should be utilized to play a more important role in the management of international air pollution.

In particular, the Committee believes that Part V should be used to deal with international air contaminants such as greenhouse gases. In 1992 Canada made a commitment in the Framework Convention on Climate Change to stabilize greenhouse gas emissions at 1990 levels by the year 2000. We note that after extensive federal-provincial discussions, the action plan the Canadian delegation took to the first Conference of the Parties in Berlin in March/April 1995 falls 13 percent short of that internationally committed target. The Committee believes that the credibility of the government is at stake on this issue and strongly urges the federal government to utilize Part V of CEPA to meet its climate change commitments.

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The Committee also recognizes that there are other ways in which the federal government can act to help reduce greenhouse gas emissions. In his submission to the Committee Dr. James P. Bruce noted that these could include:

...elimination of subsidies and tax breaks for fossil fuels to make a more level playing field with other forms of energy, invoking fuel and energy efficiency

¹ The Mining Association of Canada, Parliamentary Review of the Canadian Environmental Protection Act, Brief to the Committee, September 28, 1994, p. 9.

*standards for vehicles and appliances, more vigorous support of research and development on energy efficiency and renewable energy technologies, and foster vigorous reforestation efforts.*²

A similar point was made in the 1994 Final Report of the Federal Task Force on Economic Instruments and Disincentives to Environmentally Sound Practice.

In *Creating Opportunity* the Liberal Party promised to cut carbon dioxide emissions by 20 percent from 1988 levels by the year 2005. "A Liberal government will work with provincial and urban governments to improve energy efficiency and increase the use of renewable energies, with the aim of cutting carbon dioxide emissions by 20 percent from 1988 levels by the year 2005."³ The Committee strongly supports increased efforts to promote energy efficiency and the use of renewable energy to meet projected targets to cut greenhouse gas emissions.

The Committee strongly supports increased efforts to promote energy efficiency and the use of renewable energy to meet projected targets to cut greenhouse gas emissions.

The Committee recommends strongly that the federal government meet:

RECOMMENDATION

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- (a) its international commitment to stabilize greenhouse gas emissions at 1990 levels by the year 2000, and that it utilize Part V of CEPA, where appropriate, to do so; and
- (b) the promise in *Creating Opportunity* to improve energy efficiency and increase the use of renewable energies with the aim of cutting carbon dioxide emissions by 20 percent from 1988 levels by the year 2005.

Transboundary Water Pollution

In Chapter 7 of this Report the Committee has already noted its concern that, although Part V of CEPA deals at length with international air pollution, there is no corresponding section or coverage dealing with pollution of transboundary waters. Canada should have adequate authority to prevent and take action to correct the pollution of transboundary waters — particularly water pollution that could violate international treaty obligations with the United States or any other foreign country. To this end, the Committee recommended in Chapter 7 that Part V of CEPA be amended to include provisions authorizing the federal government to take appropriate action to prevent transboundary water pollution and to ensure that Canada complies with transboundary water pollution agreements.

² Dr. James P. Bruce, Brief to the Committee, April 6, 1995, p. 3.

³ Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, Ottawa, p. 70

Also, the Committee has noted elsewhere in the Report its concerns with the dumping of waste and other substances at sea. Canada already has international obligations under the London Convention, 1972 with respect to such dumping and may soon ratify the United Nations Convention on the Law of the Sea. In that event, Canada will have additional international obligations to meet with respect to oceans and coastal zones. To this end, the Committee has made a series of recommendations to amend Part VI of CEPA to facilitate meeting existing obligations under the London Convention, 1972 and possible future obligations under the United Nations Convention on the Law of the Sea.

Transboundary Movement of Hazardous Waste

The current provisions of CEPA implement Canada's obligations under three international agreements relating to the movement of hazardous waste: the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989); the OECD Decision concerning the Control of Transfrontier Movements of Wastes Destined for Recycling Operations (1992); and the Canada-U.S.A. Agreement Concerning the Transboundary Movement of Hazardous Waste (1986).

In March 1994, at the second meeting of Parties to the Basel Convention, it was decided to ban immediately all exports of hazardous waste from OECD countries destined for disposal in non-OECD countries. As well, the decision was taken to phase out all exports of hazardous waste to non-OECD countries destined for recovery-recycling operations by the end of 1997. CEPA regulations currently support exports of hazardous waste and waste for recycling purposes to all countries that have signed the Basel Convention. Many are non-OECD countries.

In 1992, Canada and the United States also amended the Canada-U.S.A. Agreement Concerning the Transboundary Movement of Hazardous Waste to include municipal solid waste being sent for final disposal or incineration with energy recovery. The federal government has committed itself to putting in place the necessary regulations to control the movement of non-hazardous solid waste to or from the United States. No federal action has yet been taken on this, however.

Several witnesses spoke to the issue of the transboundary movement of hazardous waste. For example, in its submission to the Committee the Saskatchewan Environmental Society expressed concern that the *Export and Import of Hazardous Wastes Regulations* "do not expressly prohibit exports to nations which lack the technical capacity, economic capability or public authorities to manage hazardous wastes in an environmentally sound manner".⁴ The Canadian Institute for Environmental Law and Policy stated:

We are not very happy about the shipment of municipal solid waste from Canada to the United States [which are scheduled for further shipment within the United States] to disadvantaged communities. We're equally

concerned about the fact that Canada is a net importer of hazardous wastes for processing and disposal from the United States. Our preference clearly is that this practice be stopped. In addition, we're still actually waiting for the Government of Canada to make the necessary regulations under CEPA to stop the export of hazardous wastes from Canada to non-OECD countries, which is something it agreed to as part of the Basel Convention a few months ago. (39:20)

In a similar vein, the Ontario Toxic Waste Research Coalition recommended that to fulfil Canada's commitments under the Basel Convention, the *Export and Import of Hazardous Wastes Regulations* under CEPA be amended "to ban export of hazardous wastes for disposal to non-OECD countries" and "to phase out the export of hazardous wastes for recycling to non-OECD countries by 1997".⁵ The Coalition also recommended that "a new regulation on the export and import on municipal solid waste . . . based on the principle of banning or phasing out the import and export of municipal waste" be developed.⁶

The Committee agrees with the witnesses that hazardous waste must be managed in an environmentally sound manner and, particularly, that it be disposed of as close as possible to the place where it was produced. The Committee believes also that CEPA and its regulations dealing with the import-export of hazardous waste should be amended to fulfil Canada's new commitments under the Basel Convention. Furthermore the Committee agrees that CEPA should be expanded to include the authority to implement Canada's commitment under the Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Waste to control the movement of non-hazardous solid waste to or from the United States.

The Committee recommends that CEPA and its regulations be amended to fulfil Canada's new commitments under the Basel Convention to ban immediately all exports of hazardous waste destined for disposal to non-OECD countries, and to phase out the exports of hazardous waste to non-OECD countries destined for recovery-recycling operations by the end of 1997.

RECOMMENDATION
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The Committee recommends that CEPA be expanded to include the authority to implement Canada's commitment under the Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Waste to control the movement of non-hazardous solid waste to or from the United States.

RECOMMENDATION
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⁴ Saskatchewan Environmental Society, *Hazardous Waste Regulation under CEPA: The Need for an Ethical and Preventive Approach*, Brief to the Committee, November 1994, p. 21.

⁵ Ontario Toxic Waste Research Coalition, *Canadian Environmental Protection Act Review: Transboundary Waste Movement Provisions*, September, 1994, p. 18.

⁶ *Ibid.*, p. 19.

Convention on Biological Diversity

With the ratification of the United Nations Convention on Biological Diversity in December 1992, Canada endorsed the Convention's principles of conservation of biodiversity and the sustainable use of biological resources for the benefit of present and future generations. The Committee has already noted elsewhere in this Report that CEPA is not the only legislation designed to protect biological diversity in Canada, that other federal laws address many of the conservation and resource-management functions set out in the Convention, and that many aspects of biological diversity fall under provincial jurisdiction. Nevertheless, CEPA has an important role to play in protecting biological diversity and in meeting the obligations of the Convention on Biological Diversity. To this end, the Committee recommended in Chapter 4 of this Report that the Preamble to CEPA include a reference to Canada's international obligations in respect of the Convention on Biological Diversity and that the words "including associated biological diversity" be added after the reference to ecosystem integrity in the new definition of "environment" in CEPA.

International Environmental Threats in the North

In Chapter 13, below, the Committee argues that as long as the federal government retains control of land and resources north of the 60th parallel, it has special responsibilities for environmental protection in the North. Canada has been an active participant in international efforts to protect the Arctic from international environmental threats. Canada is a signatory to the Arctic Environmental Protection Strategy, as well as to several other multilateral and bilateral agreements and conventions aimed at protecting the Arctic ecosystem and its resources with other circumpolar countries. In Chapter 13 the Committee makes a series of recommendations with respect to pollution in the North. The Committee supports the federal government in its continuing use of all available international opportunities, such as the proposed Arctic Council, and cooperation with the Inuit Circumpolar Conference, to pursue further reductions in the emissions of toxic substances that are deposited in the Canadian Arctic from other countries.

International Trade Measures

The preceding sections examine CEPA's role in enabling Canada to fulfill its international obligations with respect to the environment. The growing reliance on increasing numbers of international environmental agreements to address regional transboundary and global environmental concerns has been accompanied by increasing global trade and investment liberalization. The relationship between "environment and trade" now constitutes a major issue in international negotiations. Three items stand out in particular: trade and competitiveness in relation to environmental policies; international environmental agreements and trade policy; and strengthening international cooperation.

High levels of environmental protection in response to government policy or consumer preferences can have positive effects on the competitiveness of domestic producers and countries. Environmental protection measures can spur technological change, stimulate investment, improve production efficiency, and promote new industrial sectors and new market niches. However, business interests often complain that proposed environmental protection initiatives requiring changes in process and production measures will weaken the competitiveness of their industries compared to industries in other countries with different or lower standards. This can lead to pressure to harmonize standards internationally. In some cases such concerns can also lead to demands to introduce so-called “green countervailing duties”, to compensate for such negative competitiveness effects and to ensure a level playing field. Others fear that pressures for harmonization will result in “harmonizing down” to the lowest standards.

There is a growing practice of addressing environmental concerns through international trade agreements. Measures to achieve environmental objectives through trade policy were central considerations in the negotiations of the North American Agreement on Environmental Cooperation (NAAEC), the environmental side agreement to the North American Free Trade Agreement (NAFTA), and the Uruguay Round of Multilateral Trade Negotiations of the General Agreement on Tariffs and Trade (GATT). Such agreements do not eliminate Canada’s right to adopt domestic environmental regulations under CEPA or any other statutes. Both the GATT and the NAFTA specifically recognize each party’s right to establish its own levels of domestic protection and to develop its own policies and priorities, provided they generally respect the principle of non-discrimination and are no more trade restrictive than necessary. Accordingly, each party is free to adopt or modify legislative requirements to reflect its own needs and conditions. However, as noted by the Canadian Standards Association in its submission to the Committee, “it is clear, however, that the risks of challenge [to a domestic environmental law] are increased when these requirements deviate from internationally adopted standards, thereby giving internationally recognized standards a very significant role in the critical link between trade and environment issues.”⁷

There are also an increasing number of international environmental agreements that include trade prohibitions or restrictions as tools to address environmental issues. (The Montreal Protocol on Substances that Deplete the Ozone Layer, 1987, and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989, for example.) Among other purposes, such trade measures are intended as enforcement mechanisms to control “free riders” — those countries that reap the benefits of international cooperation to resolve global environmental problems without incurring the economic costs of complying with the agreements.

⁷ The Canadian Standards Association, Private Sector Environmental Standards and the Canadian Environmental Protection Act: Current and Potential Relationship, Brief to the Committee, August 31, 1994, p. 17.

The use of voluntary eco-labelling schemes is also becoming widespread. Well-designed schemes play a valuable role in informing consumers about the environmental consequences of their purchasing decisions.

Understandably, there are fears over the possible effects of agreements that threaten trade sanctions on national governments and their right to protect their environment and natural resource bases independently. In her study undertaken for the Committee, B. Jeffrey noted that both international treaties such as the Montreal Protocol and trade agreements such as the NAFTA and the GATT “may well have the effect of constraining domestic policies in many areas, including environmental policy”.⁸

A particularly important issue currently being debated by international environment and trade experts is the extent to which trade agreements should permit the unilateral use of process and production method (PPM) restrictions. A PPM restriction is a rule restricting or imposing tariffs on the import of a product on the basis of how the product was produced. Trade advocates argue that PPM restrictions undermine free trade and disrupt global trade flows. Environmental advocates argue, however, that in some cases a PPM restriction may be an appropriate means of achieving a domestic environmental objective. On the other hand, it is also recognized that if no restrictions are placed on the right of countries to impose PPM trade restrictions unilaterally, powerful trading countries might be able to use such measures for protectionist reasons under the pretext of achieving environmental objectives.

The Committee is very concerned about this issue. We strongly endorse the principle that, in general, a country should have the right and freedom to address its domestic environmental problems independently and we recognize the legitimate concerns about the possible misuse of measures such as unilateral PPM restrictions. We also recognize the potential need for trade sanctions to ensure international cooperation in addressing environmental problems with global implications, such as ozone depletion, and the transboundary movement of hazardous wastes.

The issue of international harmonization of environmental measures is not new. The OECD-led governmental harmonization process in relation to chemicals was well-known when CEPA was being drafted, and the provisions in Part II provided the flexibility to implement the internationally accepted standards of the Montreal Protocol and the Basel Convention through CEPA. The issue has come to a head, however, as a result of the actual or proposed use of unilateral trade measures to extend domestic PPM-related requirements to other countries.

The Committee agrees with *Agenda 21* and Principle 12 of the Rio Declaration that warn against the use of trade restrictions and distortions as means to offset differences in cost arising from differences in environmental standards and regulations. The Committee also agrees with the statement in the Rio Declaration that unilateral actions

⁸ B. Jeffrey, Implications of the CCME Proposals for Federal-Provincial Relations, Study undertaken for the Committee, December 1994, p. 9.

to deal with environmental challenges outside the jurisdiction of the importing country should be avoided, and that the preferable way to address these issues is through international cooperation.

The Committee further believes that harmonization of environmental standards is not always desirable from an environmental perspective because of differences in environmental circumstances in different countries. We therefore believe that the best vehicles for addressing disparities of PPM-related standards are international environmental agreements which should be negotiated, whenever possible, on a multilateral basis to ensure adequate scope for legitimate differences in such standards across jurisdictions, because of different environmental circumstances and in line with different development priorities.

The Committee also believes that the role of trade measures in strengthening the implementation and enforcement of international agreements on the environment should be further explored. There is a continuing need to develop internationally agreed-upon criteria to guide governments in the use of trade measures in the context of international environmental agreements. In this regard, we note that the agendas of upcoming meetings of the GATT/WTO Trade and Environment Committee will include consideration of the use of trade measures for environmental purposes in trade agreements and multilateral environmental agreements.

Similarly, the work programs of the United Nations Environment Program, the United Nations Conference on Trade and Development, the United Nations Commission for Sustainable Development, and the Organization for Economic Co-operation and Development, include consideration(s) of trade and environment issues — work that is complementary to that now being conducted in GATT/WTO.

The Committee welcomes the cooperation between the United Nations Environment Program and the United Nations Conference on Trade and Development to further the environmental agenda within multilateral trade negotiations.

The Committee views the North American Commission for Environmental Cooperation (NACEC) as an original, innovative organization with the potential to make a substantial contribution to future international co-operation respecting the environment. The Commission provides a forum for discussion of broad policy issues as well as specific needs and activities of the three countries (Canada, the United States and Mexico). Of particular note, the Commission has a quasi-judicial role in reviewing submissions from the public on enforcement matters and in supporting a panel process of arbitration to resolve disputes between parties on specific trade-related issues associated with failure to enforce effectively environmental laws and regulations. The Commission could well serve as a model for new ways to ensure compliance with international environmental agreements, virtually eliminating the need for trade sanctions except as a last resort.

In light of the increased importance of international trade and environment issues, the Committee makes the following recommendations:

RECOMMENDATION
85

The Committee strongly encourages the Minister of the Environment to take an active part in relevant multilateral and bilateral organizations to ensure that:

- a) the environmental agenda is upheld within bilateral and multilateral trade negotiations; and
- b) international trade agreements respect Canada's right to develop and implement appropriate domestic environmental protection measures.

SELECTED MULTILATERAL CONVENTIONS AND AGREEMENTS

| TITLE | OBJECTIVE |
|--|---|
| 1. United Nations Framework Convention on Climate Change, Rio de Janeiro, 1992. | Stabilize the concentrations of greenhouse gases in the atmosphere at a level that impedes human interference with the climate and enables ecosystems to adjust naturally and ensure their perpetuity. |
| 2. United Nations Biodiversity Convention, Rio de Janeiro, 1992. | Ensure the preservation of biological diversity, sustainable use of its components and fair and equitable sharing of the profits generated by exploiting genetic resources through, for example, adequate access to these resources and appropriate transfer of related techniques that take into account all rights to these resources and techniques, and adequate funding. |
| 3. Declaration on Protection of the Arctic Environment, Rovaniemi, 1991. | Establish, in the framework of an Arctic Environment Protection Strategy, a joint action plan in the areas of scientific co-operation, assessment of the possible effects of development on the environment, and application of measures to control pollutants and reduce their harmful effects on the Arctic environment. |
| 4. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989. | Minimize the production and transboundary movements of hazardous wastes, regulate exports and imports of hazardous wastes by enforcing the requirement to obtain official consent from the importing country, and establish a monitoring system from point of production to point of disposal. |
| 5. Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985. | Protect human and environmental health from the harmful effects of changes in the ozone layer. |
| 6. Montréal Protocol on Substances that Deplete the Ozone Layer, 1987. | Protect the ozone layer by taking measures to regulate global emissions of substances that deplete it, in the context of the Vienna Convention for the Protection of the Ozone Layer. |
| 7. Convention on Long-range Transboundary Air Pollution, Geneva, 1979. | Make every effort to limit as much as possible and prevent air pollution, including long-range transboundary air pollution. |
| 8. Convention on International Trade in Endangered Species of Wild Fauna and Flora, Washington, 1973 (amended in Bonn in 1979 and at Gaborone in 1983). | Protect specific endangered species from over-exploitation through a system of import and export permits. |
| 9. Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, London, Mexico, Moscow and Washington, 1972 (amended in London in 1978 and 1980). | Combat marine pollution resulting from dumping operations and promote regional agreements to complement the existing Convention. |
| 10. Convention on Wetlands of International Importance Especially as a Waterfowl Habitat, Ramsar, 1971 (amended in 1982). | Halt encroachment into and progressive loss of wetlands, taking into account the basic ecological functions of wetlands and their economic, cultural, scientific and recreational value. |

SELECTED BILATERAL CONVENTIONS AND AGREEMENTS

| TITLE | OBJECTIVE |
|---|--|
| 1. MOU between Environment Canada and the Ministry of Environment of Germany in Collaboration in Environmental Policy, 1990. | Promote co-operation on environment policy and complement the joint scientific and technical activities under the Science and Technology Agreement. |
| 2. MOU between the Department of the Environment of Canada and the National Environmental Protection Agency (NEPA) of the People's Republic of China on Co-operation on Environmental Matters (1993). | Broaden the scope of existing environmental co-operation with China, especially in the context of the MOU on meteorology signed in 1986 between AES and the State Meteorological Agency of China. Specifies 9 sectors of co-operation, including pollution control, development of policies and programs on sustainable development, integration of environmental priorities and economic development, and education and public awareness regarding the most pressing environmental matters. |
| 3. Framework Agreement on Commercial and Economic Co-operation between the Government of Canada and the Commission of the European Community, (1976). | Scientific and technical interchange in various sectors, including the environment. |
| 4. MOU between Environment Canada and the Minister of Environment of France on co-operation in the Field of Environment, 1991. | Provide opportunities for upgrading knowledge and understanding of environmental problems. |
| 5. MOU between EC and the Hong Kong Planning, Environment and Lands Branch on environmental co-operation, 1992. | Promote interchange of environmental technology and policy and programming expertise. |
| 6. Agreement between the Government of Canada and the Government of Japan on Co-operation in Science and Technology (1986). | Facilitate co-operation in science and technology, specifically in the environmental sector. |
| 7. Agreement on Environmental Co-operation between the Government of Canada and the Government of the United Mexican States (1990). | Harmonize Mexican priorities for environment management with Cdn expertise and technology and provide outlets for Cdn environment industries to market Cdn goods and services in Mexico. |
| 8. MOU between EC and the Ministry of Housing, Physical Planning and the Environment of The Netherlands on Environmental Co-operation (1988). | Facilitate co-operation in areas of common interest such as assessment of environmental impact, ecotoxicology, soil contamination, air pollution and water quality. |
| 9. Agreement between the Government of Canada and the Government of the (former) Soviet Union concerning Environmental co-operation, Moscow, 1989, renewed in 1993. | Develop bilateral joint projects in: pollution technology transfer; water contamination; management of natural and biological resources; environmental policy and environmental impact assessment; and relations between humans and the environment. |
| 10. Agreement between the Government of Canada and the Government of the United States of America on Air Quality. | Framework for co-operation for solving transboundary problems related to air quality and acid rain. Includes objectives for sulphur dioxide and nitrogen oxides. |
| 11. MOU on Transboundary Control of Hazardous Wastes, (Canada-United States, 1986). | Ensure that hazardous wastes crossing the US-Canada border comply with each countries' regulations. |
| 12. Canada-United States Agreement on Great Lakes Water Quality (1972, 1978 and 1987). | Re-establish the chemical, physical and biological integrity of the waters in the Great Lakes ecosystem. |
| 13. Treaty relating to Boundary Waters, (Canada-United States, 1909). | Address water flows and water quantity of shared watersheds; provide for management of boundary and transboundary waters; establish an order of precedence for use; prevent transboundary pollution; and provide for arbitration by IJC on issues of concern. |

ENVIRONMENTAL EMERGENCIES

INTRODUCTION

An “environmental emergency” is a crisis situation that derives from an event that inflicts, or threatens to inflict, damage on the environment. Increasingly, environmental emergencies involve hazardous manufactured materials. An environmental emergency can occur at any point in the life cycle of hazardous materials or substances (manufacture, storage, transportation, use, disposal). The Major Industrial Accidents Council of Canada (MIACC), whose membership is drawn from agencies at all three levels of government, industry, labour and universities, defines a “dangerous substance” as “a substance that, if released from its means of containment in sufficient quantity, could result in serious hazard to life, property or the environment”.¹ Such substances are named in Schedule XII of the *Transportation of Dangerous Goods Regulations* and appear on lists drawn up by MIACC. Only circumstances in which such substances are present in quantities exceeding pre-determined thresholds are considered to be true environmental emergencies. Since there can be environmental aspects to almost any emergency, MIACC recognizes that it is preferable to refer to “the environmental aspects of emergencies” rather than to define specific events or situations as environmental emergencies.

The responsibility for emergency management is shared by the three levels of government. In general, the provinces are responsible for public safety. However, the first response to an emergency situation is usually made at the local or regional level. Thereafter, if the scale of the emergency requires it, the provincial and federal levels may become involved. Canada has a long list of legislative measures at all levels of government, rounded out by voluntary initiatives and a draft policy framework, that deal with emergency response and management.

CURRENT PROVISIONS IN CEPA

Part II of CEPA contains a number of provisions dealing with the release of substances which have been declared toxic under section 11 and which are listed in Schedule I:

- Subsection 34(1) provides the authorization to make regulations governing aspects of the manufacturing process and other activities involving toxic

¹ Major Industrial Accidents Council of Canada (MIACC), *The Environmental Aspects of Emergencies and the Canadian Environmental Protection Act*, Brief to the Committee, November 1994, p. 2.

substances. It also grants significant powers in the areas of emergency prevention, preparedness and response at every stage of the life cycle of such substances.

- Subsection 36(1) requires those responsible for toxic substances to take reasonable emergency measures to prevent any release of the substances or to mitigate any danger resulting from the release. They are also required to inform the authorities of any emergency and notify any member of the public who may be adversely affected. Subsection 36(5) empowers an inspector to take appropriate action (or to see that appropriate action is taken) if the party responsible for the emergency fails to do so. (The inspector's order would be void, however, where it is inconsistent with other federal legislation.)
- Section 39 contains provisions for the Crown to recover the costs of any measures taken by an inspector under subsection 36(5).

Part IV, which deals with the federal government and all its agencies, works and lands, includes section 57, which provides that the party responsible for the release of a substance governed by this Part of the Act must report the incident to the proper authorities and take reasonable action to prevent or correct the situation. In the event that the party responsible fails to take action, an inspector may act, or require that action is taken. Section 58 provides that anyone may report a spill, and that the informant's identity can be kept secret.

OTHER FEDERAL LEGISLATION AFFECTING ENVIRONMENTAL EMERGENCIES

According to MIACC, more than 60 federal acts have some bearing, direct or indirect, on emergencies. Some address environmental emergencies more or less coincidentally.²

The *Transportation of Dangerous Goods Act* and its regulations cover all aspects of transportation and require specific emergency response plans. It is a good example of a federal statute that has been adopted by most provinces and is generally administered at the provincial level.

The *Canada Shipping Act* was amended in 1993 to incorporate the provisions of the International Convention on Oil Pollution, Preparedness Response and Cooperation. Its provisions cover emergency planning and training and cost recovery.

The *Fisheries Act* is used by Environment Canada to implement emergency prevention and preparedness. It too provides for cost recovery.

² Major Industrial Accidents Council of Canada (MIACC), *The Environmental Aspects of Emergencies and the Canadian Environmental Protection Act: An Analysis*, November 1994, p. 18.

Other examples include the *Hazardous Products Act*, under which the Workplace Hazardous Materials Information System (WHMIS) was set up, the *Emergencies Act*, the *Explosives Act*, and the *Pest Control Products Act*.

VOLUNTARY INITIATIVES

Some multi-stakeholder organizations have formulated standards and guidelines related to prevention, preparedness and response (risk assessment, procedure safety management, training, etc.). For example, MIACC has helped the Canadian Standards Association develop its “Emergency Planning for Industry” guidelines. Other industry associations have adopted codes that bind their member companies. The Canadian Chemical Producers’ Association “Responsible Care” program, for example, has served as a model for similar initiatives by a number of other manufacturers’ associations.

THE NATURE OF THE PROBLEM

The regulatory vacuum at the national level

Although all three levels of government have passed laws and regulations appropriate to their respective jurisdictions, the approach has been fragmented and uncoordinated. As MIACC pointed out in its brief to the Committee, “there is often overlap, duplication or gaps in the legislative coverage, with actual or potential ineffectiveness and inefficiency”.³

For the transportation of hazardous substances, the *Transportation of Dangerous Goods Act* and its provincial counterparts cover prevention, preparedness and response fairly thoroughly. However, except for radioactive material and explosives, there is no equivalent federal program regulating hazardous substances at fixed sites. This is a major omission. Equally, CEPA covers only the 21 substances now listed as toxic in Part II. Its scope is therefore extremely limited.

None of the existing federal or provincial statutes tackles all four aspects of the problem — prevention, preparedness, response, recovery — at the same time.⁴ Provisions governing prevention are rare; the emphasis is on preparedness and response. Only a few provinces currently require the registration of hazardous sites or activities, a requirement which is essential in any approach to prevention.⁵ At present, accidents can be reported through a variety of mechanisms, depending on the level of government, but there is no national coordination. The effect of these shortcomings is that the “right to know” of communities and workers who are at risk is not being

³ *Ibid.*, p. iii.

⁴ *Ibid.*, p. 33.

⁵ *Ibid.*, p. 12.

respected. Obviously, the authorities cannot inform the public if they have not been informed themselves.⁶

As for voluntary organizations such as MIACC, they are, as the West Coast Environmental Law Association pointed out, very commendable, but they cannot force anyone to formulate emergency response plans or to adopt the preventive measures recommended in their codes and guidelines. Moreover, the public has no right to review response plans that are adopted voluntarily.⁷

The federal government is a major user of petroleum and chemical products and other hazardous substances. In Part IV of CEPA, section 57 requires that measures be taken in the case of unauthorized releases, *but only if the release contravenes a regulation made under Part IV*; this drastically limits the scope of the section considering that there is now only one regulation under that Part. Environment Canada inspectors can intervene in cases where the *Fisheries Act* applies, but these are relatively rare since a fish habitat must be affected. Moreover even if a fish habitat is affected, Environment Canada cannot impose spill-prevention measures. This too is a weakness that should be corrected if the federal government is to cope with emergencies on federal lands or caused by a federal agency.

International Conventions

In reaction to a growing number of accidents world-wide, a trend has emerged to harmonize emergency response standards on the basis of the prevention/preparation/response paradigm. International bodies such as the OECD, the United Nations Program for Europe, and the International Maritime Union have developed guidelines in their respective areas of jurisdiction while keeping other jurisdictions clearly in mind.

Canada has been involved in negotiating two international agreements on accidents involving dangerous chemicals. The Convention on the Transboundary Effects of Industrial Accidents of the United Nations' Economic Commission for Europe (March 1992) establishes a framework for international cooperation. Canada has already implemented some aspects of the Convention — notably the Canada/USA Joint Inland Pollution Contingency Plan. The International Labour Organization's Convention on Prevention of Major Industrial Accidents (June 1993) offers a structured legislative model. Although this convention was endorsed by the Canadian delegation, it has not been ratified in Canada. The difficulty is that if Canada is to ratify

⁶ W. Bissett, *Towards a National Accident Prevention Strategy*, Discussion Paper, Environment Canada, Environmental Emergency Branch, Prevention Division, December 1993, p. 29.

⁷ West Coast Environmental Law Association, *CEPA and Emergency Planning*, September 13, 1994, p. 3.

these conventions, it will have to amend its legislation.⁸ For example, notification and registration of sites containing hazardous substances will have to be mandatory. The federal government will also have to come to some agreements with the provinces, which will have to participate in such programs. The harmonization initiative currently under way by the Canadian Council of Ministers of Environment includes discussions of such possibilities as a national reporting system for spills and prevention activities.

Environment Canada concludes:

Other countries and international institutions are adopting more comprehensive legislative mechanisms. In addition, as international environmental law evolves, it is imposing new obligations that Canada will have to meet to maintain its credentials as a good environmental world citizen.⁹

Cost Recovery

At present, CEPA contains no adequate provisions to recover costs incurred for response and recovery when a leak or spill occurs. Such costs include, among others, environmental clean-up and compensation for those who have suffered a loss of income. It therefore appears that the current protection against damages arising from the accidental release of a great many hazardous substances in Canada is not adequate.

PROPOSED IMPROVEMENTS

The discussion paper commissioned by Environment Canada on this issue observes:

*It is incumbent on the federal government to develop a total policy framework that includes **prevention** — to anticipate, prevent or reduce the probability of the unplanned or accidental release of a hazardous substance; **preparedness** — to establish the ability to respond to such an event; **response** — to undertake timely actions to control or stop the release and mitigate its effects; and **recovery** — to restore the ecosystem, which includes mitigation measures and compensation for environmental damage. (p. 3-4)*

Such a policy requires appropriate legislative underpinning. Based on the testimony it has heard, the Committee believes that it is both possible and desirable that CEPA become an enabling act to correct some of the deficiencies noted above and to contribute to a more comprehensive set of measures to deal with the environmental aspects of emergency situations.

However, the Committee recognizes the challenge inherent in adopting a consistent approach to program implementation across the country. Federal-provincial

⁸ W. Bissett, *Towards a National Accident Prevention Strategy*, Discussion Paper, Environment Canada, Environmental Emergency Branch, Prevention Division, December 1993, p. 29.

⁹ Environment Canada, *Reviewing CEPA, The Issues #11, Environmental Emergencies*, 1994, p. 11.

consultative mechanisms will be needed to harmonize and coordinate existing and new legislation as well as the activities of all three levels of government. The current CCME initiative may be one such opportunity.

The Committee also sensed a broad consensus among the witnesses as to the need to emphasize preparedness and prevention in the way emergencies are handled, rather than reacting after the fact. This change of orientation is consistent with the pollution-prevention approach the Committee would like to see as CEPA's guiding principle.

The Committee therefore recommends that all sites where hazardous substances are found in quantities in excess of specified thresholds should be identified and registered. The list of hazardous substances could be drawn up based on those already identified by MIACC, with possible additions from the list in Schedule XII of the *Transportation of Dangerous Goods Act*. The list of registered sites could be made available to local fire stations, those in charge of emergency preparedness, and the general public, if necessary, as is the practice with the U.S. *Emergency Planning and Community Right to Know Act* of 1986. In order to achieve consistency across Canada and harmonization with possible existing registration requirements, the federal government should initiate discussions with the provinces and territories to develop a national, single-window system for the registration of such sites.

There is also a need to implement a national spill-reporting network that is harmonized and complementary with other reporting systems now in place. Such a network, connecting local and federal authorities, would centralize and make better use of data, particularly in identifying accident trends. It should also be based on a single-window approach. In this regard, the federal government should initiate discussions with the provinces and the territories to develop a national spill-reporting mechanism.

With respect to emergencies involving activities, substances, facilities or land within federal jurisdiction, CEPA should recognize standards, codes and guidelines developed through consensus by organizations like MIACC. The opportunity to incorporate these in the Act by reference, where appropriate, would reduce the need to make separate regulations. Such codes deal with prevention, preparedness, response and recovery, and although each of the four aspects is important to all levels of government, it would be appropriate for the purposes of uniformity for the federal government to play a primary role in respect of prevention and to have the provinces and municipalities assume greater responsibility for preparedness, response and recovery, except in areas of purely federal jurisdiction.

A legislative framework of this kind would enable Canada to ratify existing and future international agreements on eco-emergencies and transboundary incidents. Moreover, it would address legitimate public concerns about the right to know and the need to recognize voluntary initiatives, and integrate previous successes. It is also an opportunity to reaffirm federal leadership in emergency management.

With respect to the costs incurred because of an emergency situation, it is now generally conceded that they should be borne by the polluter (the polluter-pays principle). At the federal level there is at least one example of an Act having been amended to include this principle in order to make cost recovery possible; the 1993 amendments to the *Canada Shipping Act* specify that the cost of measures taken “to prevent, repair, rectify or minimize damage” can be recovered. The amendments also recognize the responsibility of the owner of a polluting vessel. In the Committee’s view, CEPA should include similar provisions.

Increasingly, the question of compensation for damage caused to the environment is being discussed at the international level. Adopting such a principle would entail authorizing a civil cause of action to recover loss of contingent environmental value, measured either as loss of access to the environment or as loss of enjoyment by reason of wrongdoing. At present, there are two examples in U.S. law of an act incorporating a legal recourse option. The 1990 *Oil Pollution Act* provides that the costs of “loss of natural resource value” following an oil spill can be defined by regulation (among others). The *Comprehensive Environmental Response, Compensation and Liability Act* contains similar provisions.

It is the Committee’s opinion that Canada should move in this direction and that CEPA should be amended to allow for the recovery of such costs.

RECOMMENDATION
86

The Committee recommends that CEPA be amended to include enabling provisions for dealing with environmental emergencies. In particular, the Committee recommends that CEPA guarantee a federal “safety net” that would compensate for the shortcomings of other federal acts.

RECOMMENDATION
87

The Committee recommends that the new provisions in CEPA incorporate by reference the standards, codes and guidelines related to prevention, preparedness, response and recovery that have been developed by the Major Industrial Accidents Council of Canada (MIACC) and other multi-stakeholder associations.

RECOMMENDATION
88

The Committee recommends that federal departments, boards and agencies, federal works and undertakings, Crown corporations (as set out in Schedule III of the *Financial Administration Act*), federal regulatory bodies and federal lands that hold hazardous substances in quantities that exceed prescribed thresholds, be subject to registration and spill-reporting requirements, as well as the prevention, preparedness, response and recovery requirements referred to in the new provisions of CEPA recommended above.

RECOMMENDATION
89

The Committee recommends that, by December 31, 1996, the federal government initiate discussions with the provincial and territorial governments to develop a national, single-window system for the registration of all sites containing hazardous substances in quantities exceeding prescribed thresholds.

The Committee recommends that, by December 31, 1996, the federal government initiate discussions with the provincial and territorial governments to develop a national spill-reporting network.

RECOMMENDATION
90

The Committee recommends that CEPA be amended to authorize a civil cause of action to recover all reasonable costs and disbursements incurred to prevent, repair, remediate or minimize damage caused to the environment by spills or releases. Further, the Committee recommends that CEPA be amended to authorize a civil cause of action to recover damages for loss of access to or enjoyment of the environment because of spills or releases.

RECOMMENDATION
91

PUTTING THE FEDERAL HOUSE IN ORDER

EXISTING AUTHORITY UNDER PART IV

As legislation, CEPA has *general* application and therefore applies to *all* individuals, companies and governments in Canada. Part IV, however, is an exception in that it applies exclusively to the “Federal House” which, for the purposes of the Act, means federal departments, boards and agencies, federal works and undertakings, Crown corporations named in Schedule III to the *Financial Administration Act*, federal regulatory bodies, and federal lands, including Indian reserves.

Part IV was added to CEPA to fill the “regulatory gap” that exists with respect to environmental matters not covered by other federal laws — notably those matters that traditionally have been regulated by the provinces but which are generally not binding on the Federal House since, constitutionally, federal entities are not considered to be subject to provincially enacted laws and regulations.¹ Thus, most provincial/territorial measures dealing with such issues as sewage treatment, limits for emissions and effluents, and waste handling and disposal practices do not apply to the Federal House — a gap which Part IV of CEPA was designed to address.

At present, Part IV authorizes or requires the following :

- subject to the approval of the Governor in Council, the Minister of the Environment may develop environmental quality guidelines for federal entities and activities on federal lands (section 53);
- on the recommendation of the Minister of the Environment, the Governor in Council may make regulations that result in the protection of the environment with respect to federal lands, works and undertakings, provided no other Act of Parliament expressly allows such regulations to be made and provided the Minister responsible for the land, work or undertaking concurs with the making of the regulations (section 54(1));

¹ As a matter of constitutional law, federal legislation can bind both the federal and provincial governments, and this principle is given effect under section 4 of CEPA, which provides that the “Act is binding on Her Majesty in right of Canada or a province”. The converse, however, does not appear to hold true. As a matter of constitutional law, provincial legislation cannot bind the federal government, with the possible exception of “federal works and undertakings” such as railways and commercial aircraft. The courts have held that federal works and undertakings could be subject to provincial laws of general application, provided the legislation does not attempt to regulate the heart of the undertaking. Such a ruling was reaffirmed by the Ontario Court of Appeal in the recent case of *Ontario v. Canadian Pacific Ltd.* (13 O.R. (3d) 389). In an oral judgment handed down on January 24, 1995, the Supreme Court of Canada dismissed CP’s appeal with respect to this issue, although the Court reserved judgment on other matters.

- on the recommendation of the Minister of the Environment, the Governor in Council may make regulations setting limits on the release of emissions and effluents, and with respect to the handling and disposal of wastes, by federal departments, boards, agencies and Crown corporations (section 54(2));
- the Minister of the Environment may, for the purpose of making the above-noted regulations, require that specific information be provided to him or her to determine the environmental impact of any existing or proposed federal work or undertaking or activity on federal lands (section 56); and
- where a substance is released or is likely to be released into the environment in contravention of a regulation made under this Part, designated persons must report the incident to the responsible authority and take all reasonable steps to prevent or correct the situation and clean up the affected environment. Where such action is not taken, an inspector may take such action personally or cause or direct designated persons to do so. Voluntary reports of the incident may also, but need not, be made by non-designated persons whose identity will be protected from disclosure upon request (sections 57 and 58).

PROBLEMS WITH PART IV

Based on the evidence before the Committee, it is clear that Part IV has not performed as intended. Since the Act came into force in 1988, only one set of regulations (the *Federal Mobile PCB Treatment and Destruction Regulations*) has been passed and only one set of guidelines, (the *Glycol Guidelines*) has been issued.

Environment Canada's Issues Paper #5, *The "Federal House" in Order*,² offers a number of reasons for this lack of effective action — one being the restrictive, unclear and inadequate language of Part IV. For example :

- In contrast to section 8 of the Act, section 53 authorizes the development of guidelines only, and not environmental quality objectives and codes of practice.
- Section 54(2) authorizes limits to be prescribed by regulation on the release of *emissions* and *effluents* and in relation to waste handling and disposal practices. These constitute restrictive wording which apparently proved fatal to the plans of the Minister of the Environment to regulate underground storage tanks, since it was determined that *releases* from storage tanks did not constitute *emissions*, *effluents* or *wastes* within the meaning of that section.
- Section 57 requires that certain steps be taken in cases of unauthorized releases, but only if such releases occur in violation of a regulation made under Part IV — a requirement which limits the usefulness of this section given that only one regulation was made under this Part.

² Environment Canada, *Reviewing CEPA, The Issues #5, The "Federal House" in Order*, Minister of Supply and Services, 1994.

Part IV has not worked because of a lack of political will

These are but a few of the technical problems identified in Part IV. There are many more. Apart from the statutory deficiencies, however, it is also clear that Part IV has not worked because of a lack of political will. This point was aptly made by the authors of the CEPA Evaluation Report, who stated :

*The low priority assigned to controlling the environmental effects of federal government activities represents a significant failure of political will and has important consequences for environmental protection in Canada. As Canada's largest enterprise, the federal government potentially has a huge impact on the environment. [. . .] The fact that the federal government has assigned such a low priority to keeping its own house in order makes it impossible to evaluate the potential effectiveness of suasion versus regulation. What is clear, however, is that the current combination of low resources, inadequate legal drafting, minimum political will and almost no regulations is ineffective and must be changed.*³

The Committee agrees with this assessment. It is patently obvious that the federal government has not given priority to the ordering of its own house. Only one regulation and only one guideline have been adopted in relation to the Federal House since CEPA came into force. As the annual reports indicate, many more initiatives were planned, but never implemented.

It is patently obvious that the federal government has not given priority to the ordering of its own house. Only one regulation and only one guideline have been adopted in relation to the Federal House since CEPA came into force. As the annual reports indicate, many more initiatives were planned, but never implemented.

- **1989-90** In its first annual report on CEPA, Environment Canada indicated that regulations were being developed for the Federal House in relation to hazardous wastes, air emissions at federal boilers, municipal-type incinerators, underground storage tanks, wastewater treatment, landfills, and emergencies.⁴
- **1990-91** In its second annual report on CEPA, the Department stated that, because of a shift in priorities and limited resources, it had decided to

³ Environment Canada, *Evaluation of the Canadian Environmental Protection Act, Final Report, 1993*, p. 113.

⁴ Environment Canada, *Canadian Environmental Protection Act, Report for the Period Ending March 1990*, Minister of Supply and Services Canada 1990, p. 7.

defer the development of the regulations respecting wastewater treatment and landfills, but that it planned to develop the following regulations by specified dates : air emissions at federal boilers (summer 1992); municipal-type incinerators (fall 1992); hazardous wastes (fall 1993); and emergencies (1993). It also stated that it had decided to prepare guidelines, rather than regulations, for underground storage tanks.⁵

- **1991-92** The third annual report stated that Environment Canada had signed a Memorandum of Intent with the Department of National Defence and with Agriculture Canada (now Agriculture and Agri-Food Canada) to participate as property custodians in the Federal Sites Component of the National Contaminated Sites Remediation Program, pursuant to which 16 properties had been assessed in the first year. This report further stated that the underground storage tank guidelines would be prepared for 1992 and that the following “regulatory initiatives” were planned for 1993 : air emissions at federal boilers; municipal-type incinerators; and hazardous wastes. No mention was made, however, of the proposed regulations on emergencies within the Federal House.⁶
- **1992-93** The fourth annual report disclosed that Transport Canada, as property custodian, had joined the other above-noted departments under the Federal Sites Component of the National Contaminated Sites Remediation Program, and that 113 of the 1,037 sites identified under the program were either undergoing assessment, had been remediated or remediation work had begun in relation to them. It also indicated that glycol guidelines for de-icing practices at federal airports were planned for 1993, as were guidelines for federal underground storage tanks and regulations or registration guidelines regarding federal storage tanks. The regulatory initiatives proposed the year before with respect to air emissions at federal boilers, municipal incinerators and hazardous wastes were not mentioned, however. These planned regulations, along with those proposed earlier in relation to emergencies, were quietly dropped from the agenda without explanation.⁷
- **1993-94** The most recent annual report indicated, among other things, that the glycol guidelines had been promulgated, a code of good practice for the handling, storage, use and disposal of pesticides at federal facilities had been published, as had the *Guidelines for Environmental Auditing*:

⁵ Environment Canada, *Canadian Environmental Protection Act, Report for the Period April, 1990 — March, 1991*, Minister of Supply and Services Canada 1992, p. 26.

⁶ Environment Canada, *Canadian Environmental Protection Act, Report for the Period April 1991 to March 1992*, Minister of Supply and Services Canada 1992, p. 31.

⁷ Environment Canada, *Canadian Environmental Protection Act, Report for the Period April 1992 to March 1993*, Minister of Supply and Services Canada, 1993, p. 40.

Statement of Principles and General Practices as a national standard. The report also made reference to the Federal Code of Environmental Stewardship (which was developed in 1992) stating that in support of federal stewardship, the following regulatory initiatives under Part IV were “under review”: atmospheric emission controls for boilers at federal facilities; non-hazardous solid waste incinerators at federal facilities; spill reporting; contingency planning at federal facilities; landfill operations on federal lands and on federal facilities; and wastewater management on federal lands and at federal facilities.⁸

Virtually no regulatory action has been taken under Part IV. Even when proposed regulations were downgraded to guidelines, as in the case of the proposed underground storage tanks regulations, the guidelines were not implemented.

Although little regulatory action has been taken under Part IV, the Committee recognizes that a number of improvements have been made within the Federal House, some of which are documented in Environment Canada's Issues Paper #5. The development in 1992 of the Federal Code of Environmental Stewardship, which commits the Government of Canada to “meet or exceed the letter or spirit of federal environmental laws and, where appropriate, to be compatible with provincial and international standards”, is a notable example. The Office of Environmental Stewardship was also set up within Environment Canada in 1992 to facilitate the achievement of the Code's objectives through strategic and cost effective research and communications efforts. The Environmental Accountability Partnership (EAP), an interdepartmental committee co-chaired by the Deputy Ministers of Environment and Treasury Board, was also created in 1992. The EAP's original mandate was to encourage federal departments to incorporate sound environmental practices into some areas of federal government operations — such as environmental audits, program evaluation and budgeting and accounting practices. Today the EAP's mandate (which was broadened in 1994) also consists of helping departments to make substantive progress in the areas of energy efficiency, water conservation, solid waste reduction, the purchase and use of products that have little or no negative environmental impact, and the reduction of emissions from federal vehicles.

The National Contaminated Sites Remediation Program (NCSRP) is a further noteworthy initiative. Under this program, which was discussed in Chapter 8, the federal government contributed \$25 million for the clean-up of federal contaminated sites. As of 31 March 1995, funding had been approved for the remediation of 18 federal “orphan sites,” that is, sites where a party other than a federal department or agency is responsible for the contamination, but is unknown, unwilling or unable to carry out the clean-up. This program ended on March 31, although the Department set aside \$8 million in its 1995-1996 operational plans due to the delays incurred in getting the

⁸ Environment Canada, *Canadian Environmental Protection Act, Report for the Period April 1993 to March 1994*, Minister of Supply and Services Canada 1994, p. 29.

approved projects started. Much work, however, remains to be done. At least 1,200 contaminated federal sites have been identified, only a small portion of which have been cleaned up. Total estimated clean-up costs could exceed \$2 billion.⁹

Given the magnitude of its holdings and operations, the federal government has a material effect on — and an obligation to protect — the environment. Yet, unlike the private sector, which must comply with both federal and provincial standards, the federal government, by failing to act under Part IV, has not been held to the same standard of environmental performance.

Although Environment Canada was criticized by the Auditor General for having failed to compile a complete inventory of all national and federal contaminated sites, the NCSRP was, despite its shortcomings, an initiative that brought together the two levels of government to work on a common cause, the implementation of which, among other things, helped advance the “greening” of the Federal House.

Apart from these large-scale initiatives, progress has also been made on a smaller scale. For example:

- Transport Canada was able to recycle 95 percent of the paint thinners used at one facility with often more than ten-fold cost savings.
- As of April 1, 1994 Correctional Services Canada reduced the amount of solid wastes generated from 2 kg to 1 kg per occupant per day in many of its facilities through composting projects.
- The Department of National Defence reduced its overall energy use by 75 percent in the past ten years.
- The House of Commons has reduced waste by 78 percent through composting, recycling and green procurement.¹⁰

While these initiatives are useful, the Committee contends that they do not go far enough. Such initiatives are voluntary in nature and can be discontinued at any time.

⁹ Auditor General of Canada, *Report of the Auditor General of Canada to the House of Commons, Chapter 2, Environment Canada: Managing the Legacy of Hazardous Wastes*, May 1995, p. 2-13.

¹⁰ Environment Canada, *Reviewing CEPA, The Issues #5, The “Federal House” in Order*, Minister of Supply and Services, 1994, p. 37-40.

The Office of Environmental Stewardship, for example, will be dismantled in three years. Furthermore, voluntary initiatives need not be complied with, and if they are contravened, no sanctions apply. The *Glycol Guidelines* are a case in point. The data provided to the Committee by Environment Canada showed mixed results. Of the two regions for which data were supplied, the Atlantic Region recorded excellent compliance, whereas the record for the Ontario Region showed that the guidelines had not been complied with at *any* of the facilities — two international airports and 24 regional airports.

In the opinion of the Committee it is inappropriate for the federal government to be allowed to proceed on a voluntary basis. The federal government is Canada's largest enterprise: it owns or manages 42 per cent of the Canadian landmass; it owns or rents more than 50,000 buildings; its annual expenditures exceed \$125 billion; and it purchases about \$8.6 billion in services, a sum which increases to \$24.8 billion if purchases by federal Crown corporations are included.¹¹ Given the magnitude of its holdings and operations, the federal government has a material effect on — and an obligation to protect — the environment. Yet, unlike the private sector, which must comply with both federal and provincial standards, the federal government, by failing to act under Part IV, has not been held to the same standard of environmental performance.

...the federal government must set an example by way of its own operations and promote sustainable development in all its programs and policies. It must lead the way for all Canadians, a view which was shared by a number of witnesses appearing before the Committee.

That such a double standard should exist is unacceptable. As indicated earlier in this Report, the federal government must set an example by way of its own operations and promote sustainable development in all its programs and policies. It must lead the way for all Canadians, a view which was shared by a number of witnesses appearing before the Committee. As the Director for the School for Resource and Environmental Studies at Dalhousie University pointed out :

The federal government must set the example. If any federal operations are not of the highest environmental standards, then the federal government is really in a weak position to exert influence on the private sector or individual citizens.¹²

The Committee concurs. By failing to put its own house in order, the federal government is undermining the legitimacy of its efforts to enforce CEPA in the private

¹¹ These data are drawn from Issues Paper #5, *The "Federal House" in Order*, p. 7.

¹² Mr. Raymond Cote, Director, School for Resource and Environmental Studies, Dalhousie University, A Brief on the Canadian Environmental Protection Act, Brief to the Committee, November 7, 1994, p. 2.

sector. Moreover, should the government move away from command-and-control style regulations to non-regulated standards, its lack of moral authority in this area will increase substantially.

By failing to put its own house in order, the federal government is undermining the legitimacy of its efforts to enforce CEPA in the private sector. Moreover, should the government move away from command-and-control style regulations to non-regulated standards, its lack of moral authority in this area will increase substantially.

In the 1990 *Green Plan for a Healthy Environment*, the Government of Canada stated that : “Federal operations must be exemplary in meeting and frequently exceeding all regulations and standards.” This principle was reiterated and enshrined in the 1992 Federal Code of Environmental Stewardship which, as mentioned earlier, commits the Government of Canada to “meet or exceed the letter or spirit of federal environmental laws and, where appropriate, to be compatible with provincial and international standards”.

More recently, in *Creating Opportunity*, the Liberal Party of Canada pledged to :

*... lead in protecting Canada's environment. Business, labour, and the general public increasingly understand that the national environmental agenda can no longer be separated from the national economic agenda. It is past time for the federal government — across all departments — to act on this understanding by adopting economic and environmental agendas that converge.*¹³

The Committee holds the Government to this commitment. The federal government must assign a higher priority to its environmental responsibilities and demonstrate to the people of Canada that it is duty-bound and genuinely committed to leading the way. It must put its own house in order by taking discernable action under Part IV. While this goal will be achieved only if there is a political willingness to do so, it can be facilitated if improvements are made under Part IV.

The federal government must assign a higher priority to its environmental responsibilities and demonstrate to the people of Canada that it is duty-bound and genuinely committed to leading the way. It must put its own house in order by taking discernable action under Part IV.

¹³ Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, p. 63.

CHANGES NEEDED UNDER PART IV

Improved Regulatory Authority

This section sets out specific recommendations for change under Part IV. Since different considerations come into play, the recommendations that follow do not apply to Aboriginal peoples or to aboriginal lands and reserves. These issues are dealt with in Chapter 12.

Section 54 of CEPA provides the authority for the development of regulations. If the federal government is to put its own house in order, it is imperative that this section, which is at the heart of Part IV, be overhauled.

By most accounts, the requirement for ministerial concurrence under section 54(1) has constituted a barrier to the development of regulations under this Part. Many witnesses called for the removal of this requirement. The Deputy Minister of Environment observed :

*It seems to me that the minister of the Crown who has the administration and control of or duties with respect to the lands, etc. is also a member of the Queen's Privy Council and can provide his or her advice to the Governor in Council. So one can find ways of maintaining the integrity of the principles here without leading to that apparent confusion. [. . .] I think it is important for these regulations to have the imprimatur of the Governor in Council. How one involves other ministers is something that should be left to the government, it seems to me, rather than specified through legislation.
(70 :18-19)*

The Committee agrees that the requirement for ministerial concurrence should be abolished. It is unacceptable that affected Ministers should have an effective veto over regulations before they are even drawn up.

In addition to the requirement for ministerial concurrence, section 54(1) contains a further limitation: it authorizes regulations to be developed to protect the environment *only if* another Act of Parliament does not expressly provide for the making of such regulations. In short, this section provides residual, rather than primary, authority to develop environmental regulations. Moreover, it would seem enough that regulatory authority was conferred under another statute to preclude action under section 54(1); the fact that regulations had or had not been made under the other legislation would appear to be immaterial.

In the Committee's view, this second limitation is too broad. At a minimum, regulatory action should be permitted under section 54(1) if no regulations have been made under another statute. However, even if such a change were made, Part IV would still be subservient to environmental regulations made elsewhere. The Committee is not satisfied that this should be the case.

A large number of groups were very critical of the limitations under section 54(1) and expressed support for the recommendations made by the Canadian Institute for

Environmental Law and Policy (CIELAP) for putting the Federal House in order. In addition to advocating the elimination of the requirement for ministerial concurrence under section 54, CIELAP also recommended that the regulations developed under this section take precedence over regulations made under other federal legislation.

The Committee agrees with this recommendation. As the Canadian Environment Network's Toxics Caucus stated, the federal government "must affirm CEPA's role as the paramount environmental law".¹⁴ The Committee agrees that, where the Federal House is concerned, CEPA should be paramount. The Act should have express overriding authority over other federal legislation.

Precedents in support of this proposition exist under several federal statutes. For example, section 4(5) of the *Patent Act Amendment Act, 1992* stipulates that, in the event of a conflict between a) this section or any regulations made under this section and b) any Act of Parliament or any regulations made thereunder, section 4(5) "shall prevail to the extent of the inconsistency or conflict". Other examples can be found under the *Garnishment, Attachment and Pension Diversion Act* and the (since repealed) *Diplomatic and Consular Privileges and Immunities Act*. In short, there is no lack of precedent for making CEPA paramount over other statutes. The proposal has merit and should be adopted.

If, as the Committee recommends, section 54(1) is modified to eliminate the requirement for ministerial concurrence and to give precedence to the regulations made under its authority, there would be little need to maintain the existing distinction between subsections 54(1) and (2). These two subsections should therefore be merged into a single, all-encompassing section. As revised, such a section would authorize the development of environmental regulations in general, including, but without being limited to, regulations regarding emissions, effluents, wastes and releases of all kinds. As an all-encompassing section, it should also permit the development of regulations to cover such matters as the management of storage tanks, self-monitoring by regulatees, the conduct of environmental audits and the clean-up of federal contaminated sites.

Finally, except for aboriginal lands and reserves, the regulatory authority under this revised section should apply to all federal entities (i.e., federal departments, boards, Crown corporations and other federal bodies), federal works and undertakings and federal lands, including tenants occupying such lands. It should not apply on a selective basis as is the case at present.

The Committee recommends that Part IV of CEPA be amended :

RECOMMENDATION

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- a) **to eliminate the existing requirement for ministerial concurrence under section 54;**

¹⁴ Canadian Environmental Network's Toxics Caucus, *The Canadian Environmental Protection Act: An Agenda For Reform*, Brief to the Committee, November 1994, p. 25.

- b) to authorize the Governor in Council, on the advice of the Minister of the Environment, to make environmental regulations including, but not limited to, regulations regarding emissions, effluents, wastes, releases, the management of storage tanks, self-monitoring by regulatees, the conduct of environmental audits and the clean-up of federal contaminated sites. These regulations should be developed within three years of the coming into force of the amending legislation.
- c) to extend the regulatory authority under section 54 to all federal entities, federal works and undertakings and federal lands, including tenants occupying federal lands, but excluding aboriginal lands and reserves; and
- d) to give precedence to the provisions of Part IV and regulations made thereunder by expressly stipulating that, in the case of a conflict or inconsistency with another federal statute or regulation, the provisions and regulations made under Part IV are to prevail to the extent of the conflict or inconsistency.

The Committee recognizes that it may take some time before a truly comprehensive regulatory regime is developed for the Federal House under a revised Part IV. Environmental impact studies may be required along with studies on financial costs. Priorities will also have to be set and consultations on draft regulations may be required. All of this will take time. Action, however, is needed now. For too long, the Federal House has managed to avoid a regulated environment. This unsatisfactory state should not be allowed to continue. Therefore, the Committee believes it would be desirable if, in the short term, federal entities and lands were made subject to the applicable environmental laws of the provinces and territories in which they are located.

For too long, the Federal House has managed to avoid a regulated environment. This unsatisfactory state should not be allowed to continue. Therefore, the Committee believes it would be desirable if, in the short term, federal entities and lands were made subject to the applicable environmental laws of the provinces and territories in which they are located.

A number of witnesses favoured this approach. Several of Environment Canada's regional offices related to the Committee the difficult and sometimes embarrassing position in which they found themselves because the Federal House was not subject to binding environmental standards, and they expressed their support for this position. Moreover, several federal departments and agencies appearing before the Committee indicated that they were already complying with provincial standards on a voluntary basis. To require mandatory compliance should not therefore be overly burdensome.

In its reply to the CEPA Evaluation Report, Environment Canada indicated that it would add a new section under Part IV, allowing for the adoption by reference of

provincial regulations, which would be listed in a Schedule under the Act. The Committee endorses this proposed action, as it will provide a short-term solution to a long-standing problem.

Authorizing the adoption by reference of all relevant provincial/territorial regulations and making them apply to federal entities and lands on a geographical basis will eliminate the existing double standard and put the federal government on a par with the private sector, thus restoring its credibility in this area.

The environmental regimes in place in the provinces and territories are not all alike, however; some are more comprehensive than others. To counter this unevenness, the Committee believes it would be useful if the gaps under any particular regime were filled by adopting the best of the standards set in the other jurisdictions. This way the Federal House would be subject to a complete set of environmental standards and could therefore demonstrate more convincingly its commitment to combatting environmental degradation and to promoting pollution prevention.

The Committee stresses that the adoption by reference of provincial/territorial measures should be viewed as a short-term solution. As noted earlier, the preferred option is for model regulations to be developed for the Federal House that would give effect to the principles of sustainable development and pollution prevention and serve as an inspiration to all Canadians.

The Committee recommends that a new section be added under Part IV permitting the adoption by reference of provincial/territorial environmental standards. Should the regulatory regime of a particular province or territory be incomplete, the Committee further recommends that all gaps be filled by the adoption by reference of the best of the regulations implemented in the other jurisdictions.

RECOMMENDATION
93

Improved Ministerial Authority

Representations were also made to the Committee that section 53 should be broadened. As mentioned earlier, under this section the Minister of the Environment is authorized, with the approval of the Governor in Council, to develop environmental quality guidelines for federal entities and activities on federal lands. However, in contrast to section 8 of the Act, this section does not also authorize the development of environmental quality objectives and codes of practice.

In the opinion of the Committee, Section 53 should allow the government to develop environmental quality objectives and codes of practice for the Federal House. Nonetheless, we note that, in its response to the CEPA Evaluation Report, Environment Canada indicated that it would amend this section to include codes of practice, but did not expressly refer to environmental quality objectives. If Section 53 is to be expanded to cover codes of practice, we believe that it should also include environmental quality objectives.

Codes of practice and environmental quality objectives serve different purposes and both could therefore prove useful in guiding the Federal House in its operations and practices. Because these instruments are not legally binding, however, the Committee only encourages their use as a supplement to matters also dealt with by regulations, or with respect to matters that cannot be addressed adequately by regulations.

RECOMMENDATION
94

The Committee recommends that section 53 be amended to authorize the development of codes of practice and environmental quality objectives, as well as guidelines but that these instruments be used only as a supplement to matters also dealt with by regulation or with respect to matters that cannot be addressed adequately by regulation.

Environmental Management Plans

Many witnesses recommended that federal entities be required to develop environmental management plans. The Canadian Institute for Environmental Law and Policy (CIELAP), for example, recommended that federal entities should be expressly required to develop such plans, which should be in place within one year after the necessary amendments were made, and which should be reviewed publicly every four years thereafter. In the view of CIELAP, such plans should set out the key environmental issues facing the federal institution, along with an implementation plan to ensure that the institution, in its operations and activities, will practice and promote pollution prevention and natural resource conservation through energy efficiency, water efficiency and waste reduction, reuse, recycling and composting; protect and enhance biodiversity; promote the conservation, protection and enhancement of ecosystem integrity; and protect environmentally sensitive areas.

The Committee agrees that federal departments and agencies should be required to develop an environmental management plan. These plans should be considered integral elements of the “sustainable development strategies” that will be required of federal departments under Bill C-83 (the forthcoming amendments to the *Auditor General Act*),¹⁵ and should help promote the kind of cultural change needed to focus federal stewardship activities on continuous improvement and pollution prevention.

Departmental environmental management plans should be based on the emerging standards for environmental management systems (EMS), and should include pollution prevention plans, which were described in Chapter 6.

The British Standards Institute’s BS 7750 is currently recognized as the world’s leading environmental management system. The International Organization for Standardization plans to issue worldwide EMS standards (ISO 14000 standards) in 1996.

¹⁵ Bill C-83, *an Act to amend the Auditor General Act*, was tabled in the House of Commons and given first reading on April 25, 1995. It would create the position of the Commissioner of the Environment and Sustainable Development within the office of the Auditor General.

The Committee notes that the Canadian Standards Association (CSA) has also developed EMS standards which are different from the British standards. A spokesperson for the CSA stated, however, that the forthcoming ISO 14000 standards would comprise a comprehensive package that would bring together elements from both the Canadian and British models.¹⁶

By the time amendments are made to CEPA, the ISO 14000 standards may have been finalized. If this is the case, the Committee recommends that these standards be adopted by reference under Part IV. If, however, the ISO 14000 standards are not ready, either the British or the CSA standards should be adopted in the interim.

In summary, the Committee endorses the development of environmental management plans as a means to promote federal stewardship and to demonstrate to the private sector the effectiveness of such measures. These plans should include:

- pollution prevention targets and plans that reflect the concepts of elimination and reduction at source, reuse/recycle, and safe release hierarchy, which are based on the polluter pays principle and which provide incentives for continuous improvement beyond all relevant international, national, provincial and private sector standards;
- implementation of an environmental management system, including reforms to organizational structures, procedures, reporting requirements, information keeping and auditing mechanisms and protocols, and the allocation of resources and responsibilities to meet agreed environmental objectives; and
- the articulation of environmental objectives that will guide the departments' application of the above elements.

The Committee recommends that:

RECOMMENDATION
95

- 1) a new section be added under Part IV of CEPA to require all federal entities covered under this Part to develop environmental management plans based on the forthcoming ISO 14000 standards or, if such standards have not been finalized, on the Canadian Standard Association standards or on the British Standards Institute's BS 7750.**
- 2) The environmental management plans required under Part IV should be completed and laid before the House of Commons within two years of the enabling legislation coming into force, and revised and laid before the House of Commons every three years thereafter.**

¹⁶ Personal communication with Mr. Alan Knight of the Canadian Standards Association, May 11, 1995.

Environmental Advocates

The foregoing recommendations should go a long way toward putting the Federal House in order. However, as mentioned earlier, if there is no political will to give effect to the authority conferred under Part IV, the *status quo* will likely remain and the environment will continue to be ill-served.

The requirement that environmental management plans be developed by federal institutions is one way to promote the cultural change needed for the “greening” of the Federal House. In the opinion of the Committee, another way would be to designate a senior official responsible for environmental management within each federal department, agency, board, commission and Crown corporation. Such an official, who should be at the level of Assistant Deputy Minister or vice-president, would be charged with advancing the cause of the environment. He or she would promote the adoption of “green” procurement practices within the department, encourage the inclusion of environmental considerations in all decision and policy making, and provide assistance in the development of appropriate regulations. This official could also play a pivotal role in the development and up-dating of environmental management plans, sustainable development strategies and other stewardship initiatives, and be the designated liaison for all dealings with the Commissioner of the Environment and Sustainable Development.

The Committee congratulates the Department of National Defence for having set the precedent within the Federal House by naming an Assistant Deputy Minister of Infrastructure and Environment. The Committee urges all other departments and agencies to follow suit.

If high-ranking officials were appointed from “within” to champion the cause of the environment, the Committee believes that much greater environmental strides would be made than if Environment Canada alone had to bear most of the burden of putting the Federal House in order.

RECOMMENDATION
96

The Committee recommends that a senior management official be designated from within each federal department, agency, board, commission and Crown corporation and regulatory body, who would be responsible for environmental management.

ABORIGINAL PEOPLES AND ENVIRONMENTAL PROTECTION

INTRODUCTION

Aboriginal peoples in Canada face many environmental problems; some of the most pressing relate to the handling, storage and disposal of solid waste, the management and maintenance of underground storage tanks, and water supply and treatment. Those who live in the Canadian North are particularly exposed to a vast array of airborne and waterborne pollutants from the industrial regions of North America, Europe and Asia. According to the Assembly of First Nations (AFN), a study conducted by the Department of Indian Affairs and Northern Development (DIAND) in the late 1980s reported that, of the 600 First Nation communities surveyed, over 50 percent had water systems that did not meet Canada's safe drinking water guidelines (74:6) and over 280 communities had inadequate landfill sites. (74:7) In addition, Aboriginal peoples tend to be exposed to disproportionately higher levels of toxic chemicals, compared to the general population, because of their greater consumption of fish and wildlife.

Although most Canadians benefit from the environmental regulations that cover such matters as the disposal of solid waste, water supply and treatment, and emissions and effluents from industrial facilities, residents on Indian reserve lands do not. The reason for this has to do with legal jurisdiction. Provincial laws relating to land use, emissions, effluents, sewage treatment, waste handling and disposal, etc. do not, for the most part, apply to reserve and other federal lands. Yet, federal legislation has not been used to fill the "regulatory gap" created by inapplicable provincial laws.

ENVIRONMENTAL PROTECTION MEASURES UNDER THE *INDIAN ACT* AND CEPA

Under section 91(24) of the *Constitution Act, 1867*, only the federal government has authority to legislate in relation to "Indians and Land reserved for the Indians". In addition to the *Canadian Environmental Assessment Act*, which provides for the assessment of developments on reserve lands, the principal federal statutes relevant to the environmental protection of reserve lands are the *Indian Act* and the *Canadian Environmental Protection Act* (CEPA).

The Indian Act

Although the *Indian Act* authorizes the Canadian government to make various sorts of regulations, some of which may have an incidental effect on environmental

protection, under the precise terms of the Act the federal government has no specific authority to regulate environmental protection. Any attempt to use the current *Indian Act* to establish an environmental protection regime for reserve lands would therefore be without a strong statutory foundation.

At present, section 81 of the *Indian Act* allows band councils to enact by-laws for certain purposes that may also have implications for environmental protection. However, this section does not constitute a clear authority for environmental protection measures and, like other provisions of the *Indian Act*, cannot serve as the basis of a comprehensive environmental protection regime for reserve lands.

Other aspects of the *Indian Act* militate against it being used for environmental protection purposes. For example, there is no authority under the Act to designate individuals as inspectors or enforcement officers for environmental matters. Moreover, the Act does not have adequate penalty provisions nor does it authorize the kinds of innovative court orders that are often required to deal with environmental offenses.

Simply stated, the *Indian Act* is not an adequate legislative basis to support comprehensive environmental protection measures for Indian lands. And, in any event, aboriginal witnesses informed the Committee that using the *Indian Act* to create an environmental protection regime would not be acceptable.

The Canadian Environmental Protection Act (CEPA)

Provisions

All parts of CEPA having general application (Parts I, II, III, V, VI and VII) apply to reserve lands as well as to federal lands. In addition, Part IV has a number of specific applications to these lands.

The definition of “federal lands” under Part IV includes lands that belong to Her Majesty, reserves, surrendered lands or any other lands vested in Her Majesty and subject to the *Indian Act* (section 52 (a),(c)). This definition also includes the waters on and the airspace above these lands.

When Part IV was added to the Act, specific reference was made to Indian reserves at the behest of the provinces who were concerned that reserve lands might be used to avoid provincial environmental laws.¹ In this connection, Part IV was intended to address the regulatory gap that exists with respect to Indian lands.

Section 54 of CEPA sets out the regulation-making authority under Part IV. As already noted in Chapter 11, regulations can be made under section 54(1) where no

¹ Environment Canada, *Reviewing CEPA: An Overview of the Issues*, 1994, p. 12.

other federal law explicitly gives authority to make regulations to protect the environment. Before regulations can be made under this subsection with respect to reserve lands or other lands for which the Minister of Indian Affairs and Northern Development is responsible, however, that Minister must give his or her approval.

Section 54(2) establishes limits on the release of effluents and emissions and prescribes waste handling and disposal practices for federal departments, boards, agencies and Crown corporations. These provisions, however, do not apply to either federal lands or reserve lands.

To date, no regulations have been made under Part IV with respect to reserve lands and the regulatory gap remains.

Limitations

Environment Canada's Issues Paper #6, *Environmental Protection on Indian Lands*, points out a number of CEPA's limitations with respect to reserve lands.

As noted above, the regulation-making power under section 54(2) is limited; the wording is inadequate to deal with some of the most pressing environmental problems confronting Aboriginal peoples.²

CEPA's limited ability to deal with environmental emergencies is another shortcoming.³ Spills, leaks and environmental emergencies are relatively common in aboriginal communities. Because only some substances are regulated under CEPA, the Act cannot be used to deal with spills or releases of substances such as pesticides or petroleum products that fall outside its purview. The Committee notes, however, that the recommendations made in Chapter 10 should improve this situation.

Another limitation arises from the possibility that interim orders under section 35 of CEPA might not apply to many of the problems arising in aboriginal communities. Section 35 of CEPA allows the Minister of the Environment to make emergency regulations in the form of interim orders where immediate action is required to deal with a significant danger to the environment or to human life or health. Interim orders can be employed to deal with substances that are not on the List of Toxic Substances under the Act, but are believed to be toxic within the meaning of section 11 of CEPA, and with substances that are on the List of Toxic Substances, but are not adequately regulated. The fact that interim orders cover only substances that are CEPA-toxic, or believed to be so, limits the ability of the federal government to take immediate action to deal with other substances that may pose an imminent danger to Aboriginal

² Environment Canada, Reviewing CEPA, The Issues #6, *Environmental Protection on Indian Lands*, Minister of Supply and Services, 1994, p. 14-15.

³ *Ibid.*, p. 15-16.

peoples.⁴

The Issues Paper also identifies a number of limitations in relation to environmental monitoring and points to concerns about the development of environmental quality objectives, guidelines and codes of practice. Section 8 of CEPA requires the Minister of the Environment to develop each of these various instruments. In Part IV, however, section 53 refers only to guidelines and does not explicitly provide for codes of practice or environmental quality objectives specifically for federal lands, including Indian lands.⁵ As we stated in Chapter 11, we believe that this is not a significant issue since section 8 is of general application, and therefore should provide adequate authority for the development of objectives, codes of practice and guidelines for Indian lands.

TOWARD AN ENVIRONMENTAL PROTECTION REGIME FOR ABORIGINAL PEOPLES

Although Part IV of CEPA has its limitations and has not been used to create environmental protection measures for federal lands or reserve lands, it should not be assumed that environmental protection activity has been at a standstill.

Because the Department of Indian Affairs and Northern Development (DIAND) is responsible for reserve lands and facilities, it has a number of direct obligations under CEPA. When the Department appeared before the Committee, it described its approach to dealing with issues under Part II of the Act. This includes the development of an emergency response capability, the remediation of contaminated sites and a focus on preventative measures. DIAND has begun a five-year environmental issues inventory and remediation plan for reserve lands. This three-phase plan involves a search of all available documentation on each inhabited reserve, site visits to document environmental problems, and in-depth testing of contaminated sites. Remediation of sites posing the most serious risks is being undertaken.

The prevention component of DIAND's approach includes activities such as establishing inspection and monitoring programs, developing environmental management plans and assisting First Nation personnel to become participants in the environmental assessments of projects located on reserves. (71:102-103)

While DIAND recognizes that there are serious gaps related to environmental protection measures in the areas of waste management, fuel tanks and sewage disposal, it is unwilling to support the use of regulations under Part IV. The Department's position on this issue was put to the Committee as follows:

Put simply, . . . the federal government, through attempts at constitutional reform and a variety of self-government initiatives and through devolution . . . has been trying to forge a new relationship, with first nations, one based

⁴ *Ibid.*, p. 16-17.

⁵ *Ibid.*, p. 17-18.

on decreased dependency and on the assumption by first nation communities of key governance responsibilities. To adopt regulations under part IV, regulations that could not provide for any first nation jurisdiction, would be contrary to this objective. (71:103)

DIAND went on to describe some of the measures it is taking to address this problem. These include developing management strategies to deal with fuel tanks, waste management and sewage disposal, working to ensure that reserve infrastructure is constructed to appropriate standards and properly maintained; and instituting financial incentives to avoid emergencies. (71:104)

These activities notwithstanding, the fact remains that there is no regulatory framework to provide most Aboriginal peoples with the basic levels of environmental protection that other Canadians enjoy and take for granted.

These activities notwithstanding, the fact remains that there is no regulatory framework to provide most Aboriginal peoples with the basic levels of environmental protection that other Canadians enjoy and take for granted.

The Committee recognizes that several considerations are relevant to environmental protection on aboriginal lands.

- The Government of Canada has stated that it will act on the premise that the inherent right of self-government is an existing aboriginal and treaty right.⁶
- There is considerable support for some form of self-government for Aboriginal peoples.
- Self-government regimes will vary. Some Aboriginal people want to create full self-government regimes; others wish to establish municipal-like governments. Some will prefer a limited form of self-government where their management responsibilities are restricted to certain aspects of their affairs; yet others may not wish to be self-governing.

Moreover, at the international level, greater recognition is being given to the role of indigenous peoples in environmental protection. Principle 22 of the *Rio Declaration on Environment and Development* states that:

Indigenous people and their communities, and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective

⁶ Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, September 1993, p. 98.

*participation in the achievement of sustainable development.*⁷

Chapter 26 of *Agenda 21* refers to establishing a process to empower indigenous peoples through measures that include “recognition that the lands of indigenous peoples and their communities should be protected from activities that are environmentally unsound”.

Aboriginal persons who appeared before the Committee spoke eloquently of their vision of environmental protection as a component of their inherent right of self-government. Mr. Henry Lickers, Director of the Environment Department of the Mohawk Council of Akwesasne, noted that: “If devolution and self-government are to work, the environment must become the cornerstone to a protection of our community resources from environmental degradation caused by internal and external causes.” (50:20) In addition, the Centre for Indigenous Environmental Resources (CIER) stated that self-government must, by definition and by necessity, include comprehensive jurisdiction over environmental protection. (73:10)

While there is strong support for the concept of environmental protection within a framework of self-government, it is evident to the Committee that there is little agreement among Aboriginal people as to the extent to which they want to become involved in environmental protection on their lands, and the role that CEPA should play in their environmental protection regimes.

The Horse Lake Band of Alberta, which is already engaged in several environmental improvement initiatives, considers environmental management to be an important element of its future community-based self-government regime. As it moves toward self-government, the Band hopes to negotiate a bilateral cooperative agreement with the federal government that will address the general principles of environmental protection as well as other specific issues — such as emergency response and the management and reduction of solid and hazardous waste. (62:85) The Band is also willing to consider amendments to CEPA that address the issue of environmental protection on Indian lands. (62:86)

Chief Gordon Peters, representing the Chiefs of Ontario, suggested options for a short-term and a long-term approach to environmental protection. In the short term, he called for bilateral agreements to be negotiated with the federal government along with amendments to CEPA with the full involvement of Aboriginal peoples. The long term would involve full recognition of Aboriginal peoples’ inherent right of self-government with full control over environmental protection. (72:9-10)

Grand Chief Phil Fontaine, National Co-chair of CIER, noted that environmental protection regimes on First Nation lands may vary:

... each community ... determines how it will govern itself and implement protection. The processes, methods and legislation employed

⁷ *International Legal Materials*, (1992) Vol. 31, p. 876.

may be different and varying between regions and communities, but there will be a level of standards consistent with the highest federal and provincial standards. (73:17)

CIER, however, is unwilling to support amendments to CEPA or the *Indian Act*. It is also unwilling to support new regulations under CEPA. (73:15)

The position of the Grand Council of the Crees (of Quebec) was to call for CEPA to recognize aboriginal governments as a third order of government in Canada with full rights to participate with the provinces in the development of policies, rules and regulations under the Act. (57:9)

When Chief Eli Mandamin of the Iskatewizaagegan Independent First Nation appeared before the Committee, he outlined the three-stage process for creating an environmental protection regime on First Nation territory as follows:

The first stage reflects the current situation, in which the capacity of first nations in the area of comprehensive, long-term environmental protection is limited. Moving through this stage will be accomplished through training, education and provision of capital assistance

The second stage . . . is characterized by transitional bilateral agreement-making initiatives between first nations and the federal government and also between first nations and the provinces. These transitional framework-type agreements would deal with the systematic transfer of the exercise of jurisdiction in all facets of environmental protection and would encompass the minimum standards and enforcement capabilities of the relevant jurisdiction. These agreements should be negotiated immediately and can also deal with the capacity-building issues that characterize the current situation.

The third and final stage is represented by first nations' complete exercise of their inherent - that is, non-delegated - jurisdiction, and full capacity to create, implement, enforce and monitor all aspects of environmental protection on reserves. (61:76)

Chief Mandamin stressed that the role of CEPA in relation to environmental protection on reserves should not be to create a new legislative regime for First Nations, nor should it attempt to deal with the various environmental concerns through regulation. Rather, the Act should simply acknowledge the right of First Nations to exercise jurisdiction over environmental protection. (61:77)

Aboriginal peoples told the Committee that CEPA has not worked for them. The Committee agrees. How to respect the desire of Aboriginal peoples to govern themselves while ensuring the timely development of adequate environmental protection regimes for aboriginal lands is one of the Committee's primary concerns.

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The Committee recognizes that opportunities exist for the federal government and Aboriginal peoples to incorporate environmental protection regimes into self-government and land claim settlement agreements. As noted in Chapter 13, the aboriginal organizations which have negotiated comprehensive land claim agreements in the North are now setting standards for environmental assessment and wildlife management in their regions. Among other things, future land claim agreements could include provisions for aboriginal control over the use, management and protection of land and natural resources; the protection of fish, wildlife and habitat; the control and prevention of pollution and protection of the environment; the prohibition or control of dangerous substances and the control or prohibition of activities that adversely effect public health. These agreements and their related statutes could also ensure that there are adequate powers for Aboriginal peoples to enforce their own environmental protection laws and penalize offenders.

The Committee recommends that self-government and land claim settlement agreements negotiated between the Government of Canada and Aboriginal peoples include provisions to establish environmental protection regimes, and provide adequate authority and resources for the implementation of such regimes, where Aboriginal peoples seek to establish control over environmental protection on their lands.

**RECOMMENDATION
97**

While amendments to CEPA may not be the answer for some Aboriginal peoples, the Committee heard from others who believe the Act should be made more responsive to their concerns. However, even those Aboriginal peoples who foresee such a role for CEPA want to negotiate future amendments with respect to their lands before the Act is implemented.

The AFN told the Committee that "if this Government wants to do the right thing with CEPA, then it will involve first nations fully in all aspects of the process and decision-making." (74:8)

The Committee believes that the federal government must begin to open up the CEPA decision-making mechanisms to Aboriginal peoples. Furthermore, the Committee strongly believes, that if amendments are made to CEPA to fill the regulatory gap as it affects Aboriginal peoples, then Aboriginal peoples must be consulted and encouraged to participate fully in the development of those changes. Discussions with Aboriginal peoples should begin immediately and a process for amending the Act should be in place within two years.

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RECOMMENDATION

98

The Committee recommends that by June 30, 1997 the Department of the Environment, the Department of Indian Affairs and Northern Development, and Aboriginal peoples establish a framework to discuss CEPA and the process for amending the Act as it relates to Aboriginal peoples who do not have comprehensive environmental management regimes in place pursuant to self-government or land claim settlement agreements.

The Grand Council of the Crees (of Quebec) called for mechanisms to ensure that a strong aboriginal voice will be heard when policies, rules and regulations are being developed under CEPA. They urged aboriginal participation in the development of codes of practice, guidelines and objectives under Part I of the Act, and in consultations with respect to the creation of the Priority Substances List.⁸ The Committee supports this proposal.

RECOMMENDATION

99

The Committee recommends that Aboriginal peoples be consulted with respect to the formulation of guidelines, objectives and codes of practice under Part I of CEPA and the establishment of the Priority Substances List.

If Aboriginal peoples are to become more active in protecting the environment and their lands and communities, they must have the capability to do so. This will be particularly important as they move toward exercising jurisdiction over their own environmental protection.

Aboriginal peoples are still in the formative stages of developing expertise in environmental matters. Although the Mohawk Council of Akwesasne has been engaged in environmental protection since 1976, (50:18) the Committee learned that few of the 131 First Nation communities in Ontario have the necessary expertise to deal with environmental issues. (72:18)

CIER suggested to the Committee that work begin in the area of capacity-building, environmental emergency training, and training in the areas of testing, analysis, inspection and enforcement. Other aboriginal organizations also called for initiatives

⁸ Grand Council of the Crees (of Quebec) and the Cree Regional Authority, Brief to the Committee, November 1994, p. 9-10.

to develop and strengthen capability in the area of environmental protection (capacity-building).

The Committee believes that work in the area of capacity-building should commence immediately.

The Committee recommends that the Government of Canada provide financial and other support to Aboriginal peoples for capacity-building in the area of environmental protection, including training in the areas of environmental emergencies, monitoring, testing, analysis and enforcement.

RECOMMENDATION
100

The Committee notes that Aboriginal peoples have not been participants in the current environmental management harmonization initiative being conducted by the Canadian Council of Ministers of the Environment (CCME). CIER informed the Committee that repeated requests by First Nations to be included in the negotiations have been ignored. This was reiterated by the AFN who called for First Nations to be included in the CCME discussions as equal players *not* as stakeholders or as an interest group.

A number of Aboriginal persons expressed their concern about the CCME initiative and their uneasiness with respect to the transfer of many federal responsibilities — including environmental management — to the provincial and territorial governments. They consider environmental protection in relation to their lands to be an essential part of the federal government's fiduciary responsibility. They also question whether the provinces can adequately protect the environment that Aboriginal peoples rely on for their way of life.

The exclusion of Aboriginal peoples from the CCME harmonization process is a matter of grave concern to the Committee. Among other things, it ignores the fact that Aboriginal peoples are key players in the environment. It also ignores the fact that the ways in which the federal and provincial governments discharge their responsibilities for environmental protection have a direct effect on aboriginal lands and interests. The Committee therefore urges the CCME to include Aboriginal peoples as full participants in the harmonization initiative.

The Committee recommends that Aboriginal peoples be included as participants in the environmental management harmonization initiative of the Canadian Council of Ministers of the Environment.

RECOMMENDATION
101

As Aboriginal peoples exercise more jurisdiction over environmental matters, develop their own environmental management regimes and gain expertise in environmental protection, the issue of harmonization will have to be further addressed. In order to avoid a national patchwork of differing environmental standards, the federal, provincial and territorial governments and Aboriginal peoples, as equal partners, will have to develop consistent protection standards and harmonize their respective environmental management regimes. The goal must be to achieve the

highest level of environmental protection through the creation of comprehensive, consistent, non-duplicative environmental management regimes based on the ecosystem approach, the precautionary principle and other principles such as sustainable development and pollution prevention.

RECOMMENDATION
102

The Committee recommends that the federal, provincial and territorial governments, and Aboriginal peoples who have comprehensive environmental management schemes in place pursuant to self-government or land claim settlement agreements, work as equal partners to co-ordinate their respective environmental management regimes.

Finally, the Committee believes that an aboriginal vision of as well as traditional and local indigenous knowledge about the environment are relevant to all facets of environmental protection. Aboriginal values in relation to the environment have been ignored for too long. Aspects of their vision for the environment were explained to the Committee in the following terms:

While all my points so far may seem to be conveying the message that we expect a separate environmental scheme for First Nations, different than for the rest of Canadians, this is true, but only partly true. It is true we will ultimately create a regime that will result in a level of environmental protection that is greater and more holistic than that applied across non-native Canada. But this is not true when we consider our collective vision. This land of Canada is, whether we like it or not, and regardless of past truths, now all our land, which we all must share, and as such we are truly inseparable. Regardless of the borders we have drawn, what you do affects me and my children, and vice versa. Natives and non-natives are part of one ecosystem in Canada and Canada is part of the larger global ecosystem. It is our vision that we all share the responsibility to create a healing and sustainable approach.⁹

The Committee urges all levels of government to draw upon this vision and to act to ensure that the aboriginal perspective becomes part of environmental management regimes that strive to achieve the highest level of environmental protection for all Canadians.

Section 2 of CEPA imposes a series of duties on the government in relation to the administration of CEPA. One such duty is to “apply knowledge, science and technology to resolve environmental problems”. The Committee believes that the administration of the Act would benefit from the application of traditional or local indigenous knowledge about the environment.

RECOMMENDATION
103

The Committee recommends that paragraph 2(h) of CEPA be amended to include a reference to traditional or local indigenous knowledge.

⁹ Chief Eli Mandamin, Iskatewizaagegan Independent First Nation, Brief to the Committee, November 29, 1994, p. 6-7.

THE NORTH

BACKGROUND

Canada's two northern territories, Yukon and the Northwest Territories (NWT) account for 40 percent of the country's landmass. These territories cover most of Canada north of the 60th parallel and front on Canada's oft-forgotten third ocean, the Arctic Ocean. Although this vast region shares many characteristics with the northern reaches of several provinces, the federal government's continued jurisdiction over the territories gives it a special responsibility and an opportunity to do things differently than in the South. In this chapter, therefore, the Committee focuses on the "administrative" rather than the "geographical" North.

Although a substantial proportion of the territories' population is concentrated in the two capitals, Whitehorse and Yellowknife, most of it is scattered in a number of communities and camps spread thinly over an immense area. Much of this population is of aboriginal ancestry — about one quarter in Yukon and three fifths in the NWT. Because many Aboriginal peoples still hunt, trap and fish for food, they maintain close cultural and economic bonds with the land. These bonds place them on the frontline of environmental change in the North.

Before turning to the environmental issues preoccupying northerners today, it is important to underline what makes the North different. The northern environment is characterised by a less hospitable climate, less diverse plant and animal life and lower biological productivity than those in more temperate regions. These characteristics all make Arctic wildlife more vulnerable to disturbance than wildlife in southern Canada. One reason for this vulnerability is that contaminants persist longer in the Arctic because cold temperatures, persistent ice cover and low levels of solar radiation retard natural degradation processes. Another reason is that organisms at the top of the food chain tend to have long lifespans and, as a result, more time to accumulate contaminants they ingest in their tissues. These characteristics place northerners, who eat the food they hunt or fish, especially at risk by exposing them to potentially high levels of contamination.

The northern environment has often been described as fragile. While individual plants and animals have to be tough to endure harsh conditions, the northern environment as a whole is particularly susceptible to disruption. Not only does being downwind and downstream from major industrial centres expose the North to surprisingly high levels of pollution, but climate models also imply that the effects of global warming will be most pronounced at higher latitudes. Furthermore, because polar regions receive more ultraviolet radiation due to a naturally thin ozone layer,

emissions of chlorofluorocarbons (CFCs) have always had the greatest effect in these areas. These multiple threats have led some of the witnesses the Committee heard to argue that Canada's northern environment, and thus its inhabitants, are under attack.

The Committee was told about the North's environmental problems in hearings in Iqaluit, Yellowknife and Cambridge Bay as well as in southern Canada. The concerns witnesses expressed, often with considerable passion, covered a broad range of issues. The Committee has grouped these concerns below under four main headings: contamination from afar, waste disposal, Arctic science and institutional arrangements.

CONTAMINATION FROM AFAR

Ambient pollution levels are generally lower in the North than in southern Canada because there is less industrial activity. However, pollution is becoming a major concern for three reasons: levels are rising; northern ecosystems are more susceptible to pollution because of their inability to break down contaminants quickly; and animals at the top of the food chain (e.g., caribou, seals, whales) accumulate contaminants and these animals are a major dietary source for Aboriginal peoples.

Many of the northern witnesses who appeared before the Committee described how the Arctic is a global sink for the deposition of industrial pollutants from the northern hemisphere. These pollutants are carried over long distances by prevailing winds and ocean currents: a recent international report estimates, for example, that the Canadian Arctic receives six tonnes of PCBs per year through the atmosphere.¹ Because of these atmospheric and marine patterns, controlling a toxic substance in Canada alone does not preclude this substance from entering northern ecosystems. Indeed, chemicals that have never been used in the Arctic, such as toxaphene, are being found in water, plants and animals.

As the veil of secrecy which had cloaked activities in the former Soviet Union has been lifted, it has become clear that the Russian Arctic is heavily contaminated. Major Russian rivers flowing into the Arctic Ocean are polluted with heavy metals, organochlorines, pesticides, viral contaminants and radioactive wastes.² With regard to the latter, a recent Russian report has revealed that the USSR had dumped 16 nuclear reactors from submarines and an icebreaker, as well as 11,000 barrels of radioactive waste, into the shallow waters off the coast of Novaya Zemlya³ in the last 30 years. This contamination poses a potentially serious threat to the Canadian Arctic.

Air and waterborne pollutants, which include heavy metals, hydrocarbons, persistent organic pollutants and radionuclides, are of concern because they are found in the

¹ State of Knowledge Report of the UN ECE Task Force on Persistent Organic Pollutants, April 1994. Quoted in the submission of James Eetoolook, May 12, 1995.

² Stephanie Pfirman, Katherine Crane and Peter DeFur, "Arctic Contaminant Distribution", *Northern Perspectives*, 21:4, p 8.

³ Peter Gizewski, "Military Activity and Environmental Security: The Case of Radioactivity in the Arctic", *Northern Perspectives*, 21:4, p 18.

tissues of Arctic mammals and fish at significantly higher levels than in southern Canada. The Committee was told by witnesses in both Iqaluit and Yellowknife that hunters and fishermen have reported tumours and abnormalities in some of the animals they catch. According to the Honourable Silas Arngna'naaq, Minister of Renewable Resources for the Government of the Northwest Territories, 70 percent of all aboriginal households in the NWT hunt or fish for food. As they eat their catch, they run the risk of ingesting and accumulating chemical substances that have entered the food chain. A survey of Inuit women from northern Quebec, for example, showed that their breast milk contained concentrations of PCBs that were two to ten times greater than those of women living in southern Quebec.⁴

The contamination of traditional country foods is a widespread problem throughout the Arctic. The problem is exacerbated by the fact that the remoteness of many northern communities makes imported food prohibitively expensive. The Committee was told in several submissions that many northerners are now concerned about the safety of the food they eat. Indeed, the concentration of contaminants in northern wildlife has led public health authorities to warn on several occasions against eating the organs of caribou and seals. These warnings have led the Nunavut Implementation Commission to argue that "the ecological basis for an entire way of life is at serious risk".⁵ For southern Canadians who are protected by a food inspection system, the situation facing many aboriginal northerners is almost unimaginable. Whit Fraser, the Chairman of the Canadian Polar Commission, described the effects eloquently in the Committee's hearings in Iqaluit.

This is part of the country where every day people are faced with a decision on their plates because most northern people depend on the land and the animals for their daily food. That is a fact of life in the north.

I cannot help wondering how members would respond, and how the country would respond, if, on a regular basis, the same orders were issued across Canada on British Columbia fruit, on Alberta beef, on western grain, on Ontario poultry, on Quebec dairy products, on P.E.I. potatoes, on Maritimes lobster, or on Newfoundland turbot, I can imagine what the national outcry would be. (80)

Canada has been an active participant in international efforts to assess and control Arctic contaminants. In 1991, Canada signed the eight-nation Arctic Environmental Protection Strategy (AEPS). With its five themes of monitoring and assessing contaminants, protecting the marine environment, emergency preparedness and response, sustainable development and utilization, and conservation of flora and fauna, the AEPS represents only a first step in protecting the Arctic environment from international environmental threats. In addition, with other circumpolar countries, Canada is a signatory to several multilateral and bilateral agreements and conventions

⁴ E. Dewailly et al, "Breast Milk Contamination by PCDDs, PCDFs and PCBs in Arctic Quebec: A Preliminary Assessment", *Chemosphere*, Vol 25, Nos. 7-10, pp 1245-1249, 1992.

⁵ Nunavut Implementation Commission, Notes for a presentation to the House of Commons Standing Committee on Environment and Sustainable Development, May 9, 1995.

aimed at protecting the Arctic ecosystem and its resources. In the autumn of 1994, Canada named Mary Simon as its first Arctic ambassador. In mid-1995 Canada will host a meeting of all Arctic nations to discuss the proposed Arctic Council. Canada has invested considerable energy in promoting this council which, it hopes, will help address sustainable development issues in the circumpolar North.

The Committee recommends that the federal government

RECOMMENDATION

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- a) **continue to promote the creation of the Arctic Council as the circumpolar forum for the discussion of Arctic issues and maintain its current active participation in the Arctic Environmental Protection Strategy (AEPS);**
- b) **use all available international means to pursue further reductions in the emissions of toxic substances from other countries that are deposited in the Canadian Arctic;**
- c) **provide technical assistance to Russia to identify the scope and nature of environmental contaminants, including radionuclides, that threaten Canada.**

WASTE DISPOSAL

The legacy of human activity is all too often evident in the Canadian North. Prior to 1972, there were no rules controlling land use in the Arctic. Developers, often the government itself, brought in the equipment and fuel they needed to develop mines, build Distant Early Warning (DEW) sites, explore for oil and minerals, or establish needed infrastructure, and left behind what they could not afford to return south. As a result of such practices, the Department of Indian Affairs and Northern Development (DIAND) has identified 1,246 waste sites scattered throughout the Arctic in the form of abandoned fuel drums, buildings, equipment and garbage. Of these, 217 waste sites have been classified as hazardous because they contain toxic chemicals. The Committee visited dumpsites in Iqaluit and Cambridge Bay and was struck by their size and the uncertainty of local authorities as to what exactly some of the old dumps contain.

Today, such practices are no longer tolerated. Developers need permits issued under DIAND Territorial Land Use Regulations before they can undertake major activities. Ecology North, however, told the Committee in Yellowknife that activities below a certain threshold do not require land use permits. It is therefore still possible today for developers to leave a fuel cache of a few drums on the land with no requirement to remove it or report its location. In areas of intense mineral exploration, such as the Slave Geological Province northeast of Yellowknife, where a diamond rush is now under way, this exception could have far-reaching consequences.

The Committee recommends that the Minister of Indian Affairs and Northern Development review current exemptions to the administration of the Territorial Land Use Regulations to ensure a higher level of environmental protection.

RECOMMENDATION

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One important source of historic pollution in the North has been the Distant Early Warning (DEW) radar sites built at the height of the Cold War to defend North America against possible nuclear attack. Forty-two DEW line sites were built across the Arctic, and all but one are now abandoned. Many of these sites are close to Inuit communities and their hunting and fishing grounds. A typical DEW line site consists of one or more unsecured landfills, chemical storage tanks, and buildings and other structures in conditions ranging from intact to severely damaged. The Department of National Defense (DND) estimates the cost of fully cleaning up DEW line sites at between \$150 million and \$200 million.

This clean-up has already started. Known inventories of PCBs at DEW line sites were secured and have been removed to Swan Hills, Alberta, for destruction. The removal of PCBs from DEW line sites will reduce, but not eliminate, the quantity of PCBs entering the Arctic environment. Inuit organizations, however, continue to have concerns over the speed and thoroughness of decontamination. Nunavut Tunngavik Inc. (NTI), the Inuit land claim settlement implementation body, opposes the DND plan to clean up the Cambridge Bay DEW line site, for example, because the Department proposes to leave in place existing landfill sites without analysing their contents, and store PCB-contaminated soils in special northern disposal facilities.

In 1991, the federal government launched the Arctic Environmental Strategy (AES), a six-year, \$100 million initiative designed in part to address the historic problems posed by decades of poor practices. Although the Department of Indian Affairs and Northern Development (DIAND) will have made significant progress in identifying, assessing and cleaning up northern waste sites by the time the program runs out (477 waste sites have already been cleaned up), in his testimony before the Committee, Hiram Baubier, Director General of Natural Resources and Environment at DIAND, acknowledged that "there remains much to do".⁶

The AES has been a successful program. It enjoys the strong support of aboriginal organizations with whom it has established close working partnerships. Both the Inuit Tapirisat of Canada and the Metis Nation of the Northwest Territories called for the extension of the AES in their presentations to the Committee. The Committee is concerned that funding for the AES, including its Action on Waste Component, is now slated to run out before all hazardous waste sites have been cleaned up. In Chapter 8, the Committee recommends that, within two years, the Minister of the Environment develop regulations on the clean-up of contaminated sites under federal jurisdiction. In the Arctic, the clean-up must continue.

RECOMMENDATION
106

The Committee recommends that, in collaboration with the territorial governments and affected aboriginal organizations, the federal government extend the Arctic Environmental Strategy, establish a timetable and allocate the

⁶ Hiram Baubier, Presentation to the House of Commons Standing Committee on Environment and Sustainable Development, April 1995.

resources needed to finish cleaning up abandoned industrial and military sites that are contaminated with toxic substances.

In its Yellowknife session, the Committee heard several elders who spoke about the environmental changes they had experienced in their lifetime — the pollution of water bodies, the transformation of the landscape, the disruption to wildlife. These changes had occurred as a result of mining development and had clearly proved detrimental to the traditional way of life of the local inhabitants. The Committee was disturbed by the elders' resulting loss of confidence in the government's ability to protect their environment and health. Nowhere was this loss of trust more apparent than on the issue of arsenic pollution.

Arsenic has been released into the Yellowknife environment since gold mining started in the area. In the 1940s, emissions from the Giant Mine were estimated at 7300 kg/day. Today, as a result of the installation of control equipment and improvements in operation and maintenance procedures, daily emissions range between 20 kg and 30 kg.

The NWT Water Board regulates the discharge of arsenic into water by issuing water licenses. The allowable concentration of arsenic in the final effluent of the Giant Mine has been reduced from 5000 parts per billion allowable under the 1979-1981 water license to 500 parts per billion allowable under the 1993-1998 license. The federal and territorial governments do not regulate arsenic air emissions.

Because of historically high emissions, arsenic has been a public health issue in Yellowknife for a long time. The Committee finds this issue troubling. On the one hand, government studies show that arsenic levels in Yellowknife Bay are substantially lower today than the NWT Water Board's allowable limit for drinking water and meet the drinking water guidelines of the Canadian Council of Ministers of the Environment. Arsenic levels in the air surrounding Yellowknife are below the 24-hour average limit set by Ontario, the only Canadian jurisdiction to set ambient air standards for arsenic.

On the other hand, in 1993 the Ministers of the Environment and Health concluded that "the current concentrations of inorganic arsenic in Canada may be harmful to the environment and may constitute a danger in Canada to human life or health".⁷ They therefore deemed arsenic to be toxic under the meaning of section 11 of CEPA but have not yet taken steps to regulate arsenic discharges.

The Committee finds the apparent inconsistency between the reassuring conclusions reached regarding the safety of Yellowknife air and drinking water on the one hand, and the toxicity finding on the other, to be disturbing.

The Committee recommends that the Minister of the Environment and the Minister of Health conclude their determination of the measures they plan to apply to arsenic by December 1995.

**RECOMMENDATION
107**

⁷ Government of Canada, Canadian Environmental Protection Act: Priority Substances List Assessment Report — Arsenic and its Compounds, 1993, p vii.

The North's hazardous waste disposal problems, of course, are not limited to historic wastes. Wastes continue to be generated today through various industrial and other activities. DIAND now considers the problem of waste disposal on land on a case-by-case basis, taking into account the nature of the wastes, site conditions, and economic and other factors. Non-hazardous wastes, which form the bulk of the materials requiring disposal, may be buried on-site subject to current environmental regulations and proper mitigation. Toxic and hazardous wastes are removed from the North and disposed of in an appropriate manner, or in the case of mine tailings, regulated to avoid contamination.

According to Ecology North, the principle of "you bring it in, you take it out" should be the basis for any industrial activities in the North.⁸ Witnesses made it clear that they favour developers hauling their wastes back once they have finished their operations. This view was echoed by many witnesses, including Nunavut Tunngavik Inc. and the Kitikmeot Inuit Association.

The Committee endorses this approach in the case of hazardous wastes, which it sees as being consistent with the precautionary principle. It recognizes, however, that backhaul may not always be environmentally necessary for non-hazardous wastes. In such cases, the options for disposal may be ocean dumping and burial on land.

In the recent past, a variety of substances — from scrap metal, to old ships to municipal sewage and dredge spoils — have been disposed of routinely and legally into the Arctic ocean. In the 15-year period between 1978 and 1993, Environment Canada issued 50 ocean dumping permits: 31 for dredge material, seven for oil spill experiments, five for scrap metal and seven for a variety of other uses.

A controversy over ocean dumping in the Arctic erupted three years ago when Inuit communities in the High Arctic opposed an application by Panarctic Oils Ltd. to dump 400 tonnes of scrap metal into the ocean near Lougheed Island. They were concerned that the material to be dumped might adversely affect the marine mammals on which they depend for food. In its testimony before the Committee, the Canadian Polar Commission acknowledged that the lack of sound scientific data about the environmental impact of such dumping lies at the root of the concerns Inuit have expressed. It should be noted, however, that according to Environment Canada "shorebased contaminants present a far more serious problem for the health of the marine environment"⁹ than past ocean disposal practices. In addition, many scientists believe that the impact on the Arctic ocean from the long range atmospheric transport of contaminants is far more substantial than ocean dumping. This matter is addressed further in Chapters 7 and 9 in this Report.

Inuit organizations also expressed concern about the lack of research into the safety of burying wastes in permafrost and the possibility that some of those wastes may be

⁸ Ecology North, *A Review of the Canadian Environmental Protection Act in the Northwest Territories*, Brief to the Committee, May 11, 1995.

⁹ Environment Canada, *Environmental Protection, NWT Division*, Brief to the Committee, May 11, 1995.

jacked up through frost heave. These concerns recently led them to oppose Panarctic's plan to bury 7000 tonnes of equipment on Melville Island. In a letter tabled before the Committee¹⁰, James Eetoolook, NTI's first vice-president, expressed some of the Inuit's concerns:

NTI is concerned about the absence of a list documenting the actual material that will be buried . . . What provisions have been made to ensure that materials such as batteries, fire extinguishers, glycol (antifreeze), and hydrocarbons do not get buried? . . . What procedure will be followed for draining fluids from vehicles and other equipment and emptying barrels and fuel tanks? . . . What procedure will be followed to ensure that soil in areas that are likely to have been contaminated by hydrocarbons are tested prior to abandonment?

The Committee understands why northern residents would feel concerned about the possible environmental effects of either dumping non-hazardous industrial wastes into the ocean or burying them on land. While such practices may be necessary, it is the Committee's view that these alternatives should not be addressed in an *ad hoc*, piecemeal way but should instead be regarded as part of a larger waste management strategy in the North. It is also clear to the Committee that northerners must be fully involved in resolving their waste management problems.

The Committee recommends that developers be required to remove any hazardous wastes they generate. Ocean dumping and land burial of non-hazardous wastes should be permitted only where the proponent has demonstrated that no other more environmentally sound option exists.

RECOMMENDATION
108

ARCTIC SCIENCE

As the Committee has pointed out elsewhere in this Report, the whole of CEPA is premised on the ability of scientific research to reveal the environmental and human health implications of various human activities, most particularly the introduction of chemical substances into the environment: an effective environmental protection regime cannot exist without a program of scientific research to support it. In the case of the Arctic, the contribution that science needs to make to our understanding of how southern pollutants are transported north, how they accumulate in the food chain and their long term health effects is self-evident. Science is also important to document Canada's case in international negotiations. Despite these needs, however, existing scientific knowledge about the Arctic environment is often less well-developed than is the case in southern Canada.

The federal government invests in Arctic science through many programs, including the Arctic Environmental Strategy. Since its inception, the contaminants program of

¹⁰ Letter to Warren Johnson, Regional Director General, DIAND, Yellowknife from James Eetoolook, May 4, 1995.

the Strategy has funded over 200 research projects on the occurrence, abundance, sources, pathways and spatial and temporal trends and effects of contaminants in Arctic ecosystems. This program has provided Canada with the knowledge and resources to take a lead role in putting the reduction of international sources of pollution affecting the Arctic on the international agenda. As funding for the AES runs out, however, this research effort will be phased out.

Northerners can also contribute to scientific research through their traditional ecological knowledge. Although scientists often rejected such knowledge in the past for being anecdotal and not “scientifically-based”, it has become increasingly clear that traditional knowledge has much to contribute to our understanding of Arctic ecosystems. Much of the northern scientific data has been gathered in selected sites over relatively short periods of time. The knowledge acquired by aboriginal hunters, trappers and elders, on the other hand, is based on multiple observers, gathered over extended periods of time and on territories they know intimately. Traditional ecological knowledge can therefore contribute to our understanding of environmental change and ecosystem dynamics. Scientists, therefore, need to find ways to integrate traditional ecological knowledge more effectively in the planning and execution of science undertaken in the North.

In its submission to the Committee, the Canadian Polar Commission notes the need to establish and maintain a monitoring network to track the level, sources and distribution of southern pollutants entering the Arctic as well as a marine research station in the North to further our understanding of the Arctic marine ecosystem. The Committee shares the Commission’s concern that the federal government is reducing its support to Arctic science when “our understanding of basic ecosystem and food-chain dynamics in the North is extremely deficient”.¹¹ Cuts already announced to the Polar Continental Shelf Project which provides so much of the logistical support to Arctic research, for example, could effectively make many important research sites in the High Arctic inaccessible and compromise Canada’s ability to monitor the long-range transport of Arctic contaminants. Some members of the Committee visited the Project base in Resolute Bay and were impressed by the range of projects it supports. For its part, NTI asks that research on contaminants be increased.

It is increasingly recognized that northerners must become more fully involved in research that concerns them. Several witnesses complained to the Committee of research results not being communicated adequately to them, thereby sometimes creating unnecessary anxiety. The contamination of traditional (country) foods is a case in point: although most country foods remain nutritionally superior to “store-bought” foods, even at current levels of contamination, some aboriginal northerners are no longer sure of what their diet should include.

¹¹ Canadian Polar Commission: Speaking Notes for a Submission to the House of Commons Standing Committee on Environment and Sustainable Development, May 9, 1995.

The Committee recommends that the federal government**RECOMMENDATION****109**

- a) **reinstate funding for the Polar Continental Shelf Project;**
- b) **maintain its current research effort on northern contaminants;**
- c) **work with the territorial governments, aboriginal groups and the Canadian Polar Commission to improve the communication of scientific information to northern residents; and**
- d) **increase its understanding of traditional ecological knowledge and its use in resource planning and management.**

INSTITUTIONAL ARRANGEMENTS

As noted earlier, one of the distinguishing characteristics of the North is that it is under federal jurisdiction. While this fact gives the federal government a greater responsibility for environmental protection than it has in the provinces, it has not given Environment Canada a greater role. It is, instead, the Minister of Indian Affairs and Northern Development who is responsible for managing the land, water and mineral resources in the North. In this respect, the Minister exercises many of the same environmental protection and permitting powers as a provincial government.

As a result of devolution and the settlement of aboriginal claims, environmental protection in the North is increasingly becoming a collective responsibility shared by the federal and territorial governments and various aboriginal organizations. Both territorial governments have passed environmental protection acts, and each of the comprehensive claim settlements negotiated to date creates joint aboriginal-government mechanisms to assess environmental impacts and manage wildlife. Over time, federal responsibility for environmental protection will continue to diminish as aboriginal organizations and the territorial governments assume greater powers.

The adequacy of the current regulatory regime in the North seems to depend on the observer's point of view. With one exception (*the Yukon Mining Act*), DIAND appears satisfied that "a complete framework responding to the environmental concerns associated with northern resource and environmental management"¹² exists. Most of the witnesses the Committee heard did not share this view. Some witnesses complained about the seeming lack of coordination among the many federal and territorial agencies with environmental responsibilities. In addition, as elsewhere in Canada, witnesses noted that the lack of regulations under both Parts II (toxic substances) and IV (ocean dumping) of CEPA hampers Environment Canada's ability to protect the Northern environment. For his part, the Honourable Silas Arngna'naaq recommended that the

¹² Hiram Baubier, Presentation to the House of Commons Standing Committee on Environment and Sustainable Development, April 1995.

definition of "federal lands" under Part IV of CEPA be clarified because of the potential it created for both environmental protection gaps and overlapping authorities with respect to land management.

It is beyond the Committee's current review of CEPA to comment on the overall environmental protection regime in the North, although most of the northerners who made presentations are clearly concerned that it is inadequate to address the formidable challenges facing the North. In the view of the Committee, the main issue in the North is not so much the existence of sufficient environmental protection instruments as the lack of resources to do the job.

Through their comprehensive claim settlements, northern aboriginal organizations have established high standards of environmental management in their respective regions, based on the principle of sustainable development. These standards apply primarily to environmental assessment and wildlife management although in some cases they also include land and water management. All aboriginal organizations who appeared before the Committee spoke of their desire to be more actively involved in the protection of their environment. The Committee agrees that these organizations have much to contribute to environmental protection in the North, including the development of future amendments to CEPA. In Chapter 12 there is a full discussion of the contribution of aboriginal organizations to the administration and possible changes to CEPA.

By the turn of the century, the North will be a different place from what it is now. A new territory, Nunavut, will have been created out of the NWT; the provisions of the five claim settlements already reached will have been implemented and, it is hoped, further progress will have been made in negotiating the two remaining settlements. It is also likely that DIAND will have transferred most if not all of its last remaining responsibilities over land, water and minerals to the three territorial governments. Yet, even though political development in the North will be almost complete, the region is likely to remain financially dependent on the federal government for many years to come. What residual responsibilities will the federal government have in the North? Given northerners' continued reliance on their environment and the international threat facing that environment, it is reasonable to expect that the federal government will continue to play an important role in northern scientific research and environmental protection.

Many northerners are troubled by federal budget cuts and their possible implications for the North. In their testimony before the Committee, both the Nunavut Implementation Committee and the Kitikmeot Inuit Association expressed their concern that the mandates and core capabilities of federal departments responsible for environmental protection in the North be maintained. For its part, the Council for Yukon Indians urged Environment Canada to play a more active role in the North.

The Committee shares these concerns. It notes that Environment Canada has withdrawn its environmental protection staff in Nunavut. Although industrial activity in

Nunavut is low, the current high interest in diamond and base metal mining in the central Arctic implies this situation will change.

The Committee recommends that Environment Canada re-examine its current role in the North in light of the settlement of aboriginal claims, the devolution of responsibilities to the territorial governments and the division of the Northwest Territories. The Committee further recommends that Environment Canada re-establish as soon as possible a local environmental protection presence in Nunavut.

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CONCLUSION

The natural environment and its renewable resources are an integral part of the economic, cultural and social fabric of northern communities, especially Aboriginal peoples who have inhabited the North for thousands of years. For many years, until the early 1970s, northerners suffered from the environmental neglect of developers and received few offsetting economic benefits. Now they find that their environment is threatened by the long-range transport of pollutants from southern sources and anticipated industrial development, including mining.

As long as it retains control of land and resources north of the 60th parallel, the federal government holds special responsibilities in the North. One of these is to protect the environment on which northerners depend. Through the Arctic Environmental Strategy, the federal government has begun to address many of the environmental problems confronting the North but much more remains to be done.

In his testimony to the Committee, Joe Kunuk, mayor of Iqaluit, set down his standards for measuring the effectiveness of CEPA: country food should be safe to eat and contaminated sites should be cleaned up and contaminants removed. It is clear to the Committee that CEPA does not meet these standards. In the North, Canadians still have an opportunity to avoid the mistakes they made in the South and protect environmental assets that are threatened elsewhere. The vulnerability of northern ecosystems and the exposure of many northerners to the contamination through their diet led several witnesses to argue for the strictest possible standards for the use, release and recovery of toxic substances. Although the accumulation of toxic substances poses a threat to human health everywhere, it is of particular concern in the North, both because of the region's fragility and its role as a global sink for pollutants. This gives the federal government special responsibilities towards all northerners. Nowhere is the need for the application of the precautionary principle, the pollution-prevention principle and concerted international action more evident than in the Arctic.

IMPROVED PUBLIC PARTICIPATION AND CITIZENS' RIGHTS

INTRODUCTION

Section 2(d) of CEPA requires the federal government to “encourage the participation of the people of Canada in the making of decisions that affect the environment”. The Committee wishes to emphasize the importance of this obligation. The government alone cannot — nor should it be expected to — protect the environment. Everyone has a stake in a healthy, clean and safe environment; everyone, therefore, has a part to play in ensuring its well-being.

The government alone cannot — nor should it be expected to — protect the environment. Everyone has a stake in a healthy, clean and safe environment; everyone, therefore, has a part to play in ensuring its well-being.

Encouraging members of the public to participate in decisions that affect them and their environment can be accomplished in a number of ways. One is to provide them with improved access to information.

Access to information is an important component of the growing “community right to know” movement which began in the United States in the mid-1970s when municipalities passed laws requiring industrial facilities to report their hazardous chemical inventories. In 1983, New Jersey became the first state to pass community right to know legislation; it required extensive reporting of toxic substances used and released by industrial facilities. The Toxic Release Inventory (TRI) is another noteworthy American initiative. This national program requires designated facilities to submit annual reports on the amounts of listed toxic chemicals released into the environment above specified thresholds, as well as discharges to publicly-owned treatment works and transfers to off-site locations for treatment, storage or disposal.

In Canada, the Workplace Hazardous Materials Information System (WHMIS) was implemented in 1987. This integrated system of provincial and federal laws requires disclosure of information on chemical hazards in the workplace. The National Pollutant Release Inventory (NPRI) was in turn inaugurated under CEPA in 1993. Like the TRI, the NPRI is a national and publicly accessible inventory on the release of selected contaminants. Initiatives such as these and that of improving access to information through the establishment of a public registry are central to the worker and community right to know movement.

Another new development has to do with the enactment of environmental bill of rights legislation. Such legislation incorporates the rights of citizens *vis-à-vis* their environment and provides them with a range of tools with which to combat environmental degradation. The *Michigan Environmental Protection Act* set the precedent in 1970. Quebec's *Environmental Quality Act* was among the first Canadian laws to have environmental rights enshrined in it. More recent initiatives, such as Ontario's *Environmental Bill of Rights* and the *Yukon Environment Act*, have firmly established the principle of environmental rights law in Canada.

In *Creating Opportunity*, the Liberal Party stated:

Individual Canadians are far ahead of their governments in their desire for environmental protection. Our greatest asset in moving towards sustainability is concern for the environment, combined with the resourcefulness of the Canadian people. The Liberal program of investing in people will be as valuable in surmounting our environmental challenges as it will be in overcoming our economic challenges. A new Liberal government will build on this public awareness and give individuals new tools to protect the environment and to participate in environmental decision-making.¹

Further to this commitment, this chapter sets out a number of recommendations that will reinforce the right of Canadians to be informed about the environmental decisions that affect their daily lives, and will enable them to play a more active part in ensuring that correct decisions are made. Also recommended is the adoption of a range of measures that will make it easier for the community to intervene when the environment is at risk and to bring harmful activity to a stop. In this connection, the Committee supports the establishment of a public registry; the enactment of improved notice, comment and appeal provisions; a statutory basis for the NPRI and the authority to broaden its scope; the narrowing of the confidentiality provisions respecting proprietary information; the broadening of existing whistleblower protection; and the adoption of enhanced civil and criminal remedies.

A PUBLIC REGISTRY

Informing the public of action taken or proposed under CEPA is accomplished, at present, primarily through the *Canada Gazette*. However, other means are prescribed under the Act. For example, the activities of the Federal-Provincial Advisory Committee, established pursuant to section 6, have to be included as part of the annual report on CEPA that Environment Canada produces and tables in Parliament pursuant to section 138. A report on the administration of the equivalency agreement provisions under section 34(5) to (9) of the Act must also be included as part of that report. Publication in a local newspaper is, in turn, required in only one instance; when an application is made for an ocean dumping permit, section 71(1) requires, as a condition, that notice of the application be published in a general circulation newspaper in the vicinity of the proposed disposal.

¹ Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, p. 68.

However, not all information gathered under CEPA must be published. Where publication is not required, it can be difficult for members of the public to know what information is available and how it may be obtained. Although individual requests can be submitted to the Department, there may be delays in obtaining the information requested and in responding to individual requests. There may also be some question as to whether some information should be released without a formal request under the federal *Access to Information Act*. Conversely, where publication is required under the Act, the primary means employed — publication in the *Canada Gazette* — is widely regarded as an ineffective way to reach the public.

Many witnesses recommended that a public registry be established and that it include an electronic component accessible on the Internet.

The use of a public registry as a means to disseminate government information is a growing phenomenon, both in Canada and abroad. In the United Kingdom, for example, Her Majesty's Inspectorate of Pollution is adopting a public registry system that will carry a variety of environmental information, ranging from environmental assessments to the detailed information supplied by applicants in support of applications. Closer to home, a public registry is called for in the United States under the *Emergency Planning and Community Right to Know Act* and in British Columbia under the *Environmental Assessment Act* and *Waste Management Act*. The Ontario *Environmental Bill of Rights* also calls for a public registry, which is accessible on home computers by means of a modem. At the federal level, a public registry is mandated under the newly proclaimed federal *Canadian Environmental Assessment Act*.²

The Committee strongly supports the establishment of a public registry under CEPA. Such a system would vastly improve access to a diverse array of information and might also result in cost savings in processing individual requests. As the Committee has already stated, it is vital that members of the public be made aware of, and encouraged to participate in, the decisions that affect them. The first step in achieving this goal, in the Committee's opinion, is to provide comprehensive, easily accessible information.

The information provided in an electronic registry should be as comprehensive as possible. At a minimum, it should provide information with respect to the NPRI data; monitoring, inspection and enforcement data; information submitted to the government under the notification provisions; information gathered under Part II or relied on to determine the toxicity of substances; applications for and the contents of ocean dumping permits issued under Part VI; proposed and final texts of all federal/provincial/territorial harmonization, equivalency and administrative agreements (which are discussed in greater detail in a subsequent chapter); proposed and final texts of all environmental quality objectives, guidelines and codes of practice,

² Environment Canada, *Reviewing CEPA, The Issues #9, Community Right to Know*, Minister of Supply and Services, 1994, and West Coast Environmental Law Association, *Ensuring Meaningful Public and Worker Involvement in Environmental Protection under CEPA*, Brief to the Committee, September 13, 1994.

regulations and regulatory impact statements; and all plans for environmental management and pollution prevention initiatives that the Committee recommends elsewhere in this Report be required under CEPA.

In addition, if the public registry had an electronic component, it would be possible to use the Internet to link the CEPA registry with other databases at a relatively low cost. For example, linkages could be made with Statistics Canada's Environmental Information System, the environmental assessment databases established by both federal and provincial governments, the toxicity databases under the Workplace Hazardous Materials Information System, and with contaminated site registries, such as the one that was recently established in British Columbia.

Although a traditional paper-based public registry would be useful, the Committee agrees that a registry in an electronic format would be optimal. Such a system offers endless possibilities for information retrieval and dissemination. The technology is already here; CEPA must take advantage of it. Anything less would be a half-measure.

Although a traditional paper-based public registry would be useful, the Committee agrees that a registry in an electronic format would be optimal. Such a system offers endless possibilities for information retrieval and dissemination. The technology is already here; CEPA must take advantage of it. Anything less would be a half-measure.

The Committee recognizes that to establish and maintain such a system will be costly. It might therefore be appropriate to attempt some cost recovery by imposing user fees. Such an option, the Committee notes, has been adopted under the *Canadian Environmental Assessment Act (CEAA)*. Pursuant to the Guidelines for Public Access to Documents developed under CEAA, a fee similar to that imposed under the *Access to Information Act* may be charged when copies of requested documents are provided. If such a measure were implemented for providing information under CEPA, it would help to offset some of the related costs. It should be stressed, however, that while the Committee does not oppose user fees *per se*, the fees charged for services rendered must be reasonable. They must not constitute a disincentive to requests for information.

The Committee recommends that:

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- 1) CEPA be amended to require the establishment of a public registry of information in an electronic format, which would be accessible on the Internet and which would provide, at a minimum, information concerning the data comprised in the National Pollutant Release Inventory; monitoring, inspection and enforcement data; information submitted to the government under the notification provisions; information gathered under Part II or relied on to determine the toxicity**

of substances; applications for and the contents of ocean dumping permits issued under Part VI; proposed and final texts of all federal/provincial/territorial harmonization, equivalency and administrative agreements; proposed and final texts of all environmental quality objectives, guidelines and codes of practice, regulations and regulatory impact statements; environmental management plans; and pollution-prevention plans.

- 2) The Committee further recommends that authority be provided under CEPA to adopt cost recovery measures to help offset some of the costs related to the electronic public registry.

THE RIGHT TO NOTICE, COMMENT AND APPEAL

CEPA requires, in some cases, that members of the public be informed of actions taken or proposed under the Act. For example, notice in the *Canada Gazette* must be given:

- when substances are added to, or deleted from, the Domestic Substances List and the Non-domestic Substances List (section 25(4));
- when waivers are granted in relation to the information that must be provided with respect to new substances (sections 26(5) and 27(4));
- when the import or manufacture of a new substance suspected of being toxic is either prohibited or allowed under specified terms and conditions (section 29(5));
- when regulations are proposed for substances on the Toxic Substances List (section 48); and
- when an ocean dumping permit is granted or when the terms and conditions of the permit have been modified (section 73).

While public notice must be given in many instances, it is not required in all cases. For example, when information is provided to the Minister of Health and the Minister of the Environment respecting new substances, or when field tests on new substances are conducted, notice is not required (sections 26 and 29). Even when notice is required, in many cases its purpose is not to provide members of the public with the opportunity to comment but rather to inform them of action taken. In many instances, the decision has already been taken and the public is merely being presented with the *fait accompli*. Thus, although public consultations may be held at the Ministers' discretion with respect to public health and environmental quality objectives, guidelines and codes of practice under sections 8 and 9, CEPA does not require that notice be given. Neither does CEPA require that the public be given an opportunity to comment on such initiatives once they have been developed, but before they are adopted. The only requirement is that notice of these initiatives be published in the *Canada Gazette* after-the-fact. Similarly, when waivers are granted with respect to new substances under sections 26 and 27, publication in the *Canada Gazette* is required only after the waiver has been granted. The public is not given an opportunity to comment on the waivers beforehand. Ocean dumping permits are a further example. Once an ocean

dumping permit has been granted or modified, section 73 requires that a copy of the permit or of its modified terms and conditions be published in the *Canada Gazette*. Again, the public is not given an opportunity to comment. Indeed, based on the wording of section 73, the authorized dumping may proceed as soon as the day following publication.³

Although CEPA allows few opportunities for the public to comment on proposals before decisions are made, it does allow certain decisions to be examined by a board of review, usually by allowing a dissatisfied party to file a notice of objection. Some decisions are reviewable on a mandatory basis; others, however, are reviewable only by leave of the Minister; still others are not reviewable at all.

The ocean dumping provisions provide a good example of the different approaches taken under the Act. Once an ocean dumping permit has been issued or its terms and conditions are varied, the applicant or permit holder has the right to have the decision assessed by a board of review by filing a notice of objection. If a member of the public challenges the terms and conditions under which a permit was issued, however, a board of review will be convened only if the Minister considers such action advisable (section 89).

The circumstances under which the Minister *shall* or *may* establish a board of review are set out under section 89. However, there are at least four instances under the Act where notices of objection are not prescribed, thereby precluding a review:

- when a substance on the Priority Substance List is assessed as “toxic” and is added to the List of Toxic Substances (section 13);
- when substances are added to the Domestic Substances List, which means in effect that there has been an implicit finding of “not toxic”(section 25);
- when information requirements regarding possibly toxic substances are waived (sections 26 and 27); and
- when the manufacturing or import of substances suspected of being “toxic” are approved with conditions or when prohibitions or conditions on such substances are varied (section 29).

It is evident from the foregoing that the opportunities for members of the public to participate in the decision-making process and to have unsatisfactory decisions reviewed by an impartial arbiter are both uneven and limited under CEPA.

In comparative terms, CEPA provides fewer opportunities for public input than other leading environmental statutes. A common feature of U.S. environmental laws is the requirement that public notice of pending decisions be given and that the public be

³ Section 73 (2) stipulates that publication “shall be made before the first date on which dumping, loading or disposal is authorized by the permit or by the varied terms or conditions,” thereby indicating that publication on the eve of the proposed dumping would be permissible.

allowed a reasonable opportunity to comment. Ontario's *Environmental Bill of Rights* (the EBR) also contains extensive provisions for public participation.

The Committee received submissions from both industry and environmentalists requesting that the decision-making process under CEPA be "opened up". Inco, for example, complained that the existing process for assessing toxic substances was unsatisfactory because industry and public input often occurred too late — after a decision on toxicity had been reached. Stating that CEPA should draw from the U.S. example, the company recommended that provision be made for public input prior to assessment, and that draft proposals be released for comment:

The U.S. approach might be instructive. There, prior to any assessment, the government puts out a Notice of Proposed Rulemaking (NPR), which gives the purpose of the exercise and which may ask for specific information from the public. Once the initial assessment is done, the government puts out a draft proposal for public comment. The final ruling is released together with information on what the public had to say and how the government responded.⁴

The Canadian Institute for Environmental Law and Policy (CIELAP) also urged that the assessment process be opened up:

Expanded notice and comment provisions will ensure that the public is aware of, and has an opportunity to participate in, decisions regarding the approval for use in Canada of substances which may negatively affect the environment and human health. Notice and comment provisions would also improve accountability in the administration of CEPA. In addition, opportunities for public participation may enhance the quality of decision-making by providing members of the public, including non-governmental organizations and members of the academic community, with an opportunity to bring to the attention of CEPA administrators information of which they might not otherwise be aware. . . . Public comment periods of not less than sixty days should be provided following all public notices provided under CEPA.⁵

The West Coast Environmental Law Association went even further. It recommended that CEPA require public notice and that the public also be given the opportunity to comment on all proposed regulations, environmental quality objectives, guidelines, codes of practice, administrative and equivalency agreements, permits and other instruments under the Act.⁶

The Committee agrees that the decision-making process should be opened up. As noted earlier, section 2(d) of CEPA requires the federal government to "encourage the participation of the people of Canada in the making of decisions that affect the

⁴ Inco, *The Canadian Environmental Protection Act*, Brief to the Committee, Sept. 2, 1994, p. 11.

⁵ Canadian Institute for Environmental Law and Policy, *Reforming the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, Appendix 3, p. 11.

⁶ West Coast Environmental Law Association, *Ensuring Meaningful Public and Worker Involvement in Environmental Protection under CEPA*, Brief to the Committee, September 13, 1994, p. 25.

environment". In light of the limited and uneven opportunities for notice, comment and review under the Act, the Committee is not satisfied that this statutory requirement is being met. The Committee recognizes that in many circumstances it has been the stated policy and practice of the Department to consult the public prior to making a particular decision. Such an approach, however, is not required by the statute.

The Committee contends that public participation in the decision-making process should not only be fostered, it should be guaranteed under the legislation unless there are compelling reasons not to do so. As the Canadian Institute for Environmental Law and Policy explained, provisions under the Act for improved notice and comment would not only ensure that the public is made aware of and has an opportunity to participate in decisions regarding their environment, they might also improve the government's accountability in the administration of CEPA and enhance the quality of decision-making.⁷

The Committee agrees. In a democratic society, the public should, as far as possible, be given the opportunity to provide input in matters that affect them and their environment. In the Committee's opinion, the notice and comment provisions under CEPA must be strengthened.

Various suggestions were put forward in submissions as to what would constitute an appropriate period of time for public comment. Some witnesses advocated 90-days from the date of notice; others considered 30 days to be sufficient. The Committee considers that, in most cases, a 60-day period for comment from the date of publication should be adequate, particularly if, as was recommended earlier, an electronic registry is established to inform the public of matters pending under the Act. The Committee recognizes, however, that a shorter notice and comment period may be required in exceptional circumstances; for example, where emergency action is required. Exceptions to the 60-day rule should therefore be allowed under the legislation, although they should be clearly identified.

If the right of the public to participate in the decision-making process is to be meaningful, and not merely *pro forma*, the Committee also believes that the Act should require that the Minister consider the comments made and, when publishing the decision, provide a written summary outlining how the public comments were taken into account.

The Committee recommends that:

- a) **CEPA be amended to require that notice be given in relation to, and that the public be afforded a reasonable opportunity to comment on, all proposed regulations, environmental quality objectives, guidelines,**

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⁷ Canadian Institute for Environmental Law and Policy, Reforming the Canadian Environmental Protection Act, Brief to the Committee, September 1994, Appendix 3, p. 10.

codes of practice, agreements, permits and other matters dealt with under the Act.

- b) A 60-day period for comments be prescribed in all cases, except where, pursuant to well defined criteria under the Act, the Minister determines that an emergency exists and therefore a shorter notice period or no notice is justified.**
- c) The Minister be expressly required to consider the comments that were made by the public and provide a written summary outlining how these comments were taken into account.**

The Committee also received submissions from industry and environmentalists requesting that the appeal or review provisions under CEPA be broadened.

The Mining Association of Canada and the Canadian Chemical Producers Association, for example, requested that a board of review be established in cases where a substance on the Priority Substance List is assessed as toxic under section 13. This section, as noted earlier, allows a review only where a substance has been assessed as “not toxic.”

Other witnesses recommended that reviews be permitted under the Act in cases where they are now either unavailable or are at the Minister’s discretion. Thus, CIELAP recommended that, unless the Minister considers the application for review to be frivolous or vexatious, a board of review should be required under the Act with respect to:

- the addition of substances to the Domestic Substances List (section 30);
- the waiving of information requirements (section 26);
- the approval with conditions or when prohibitions or conditions regarding substances suspected of being “toxic” are varied or rescinded (section 29);
- the approval of field tests of new substances, particularly those involving open release into the environment (section 29);
- the need for a regulation to prohibit or control the use, manufacture, processing, sale, offering for sale, import or export of a “toxic substance” or a product containing a “toxic substance”.⁸

⁸ *Ibid.*, p.11.

Several groups requested that members of the public be extended the right to request a review when an ocean dumping permit has been granted. The West Coast Environmental Law Association also recommended that the public be granted the right to request a review of an existing policy, statute, regulation or other instrument to determine if it adequately protects the environment; that the decision on whether or not to grant the review be made on the basis of criteria established under the Act; and that reasons for the decision be provided.⁹

The Committee has given careful consideration to these recommendations. It agrees with the West Coast Environmental Law Association that CEPA should provide a mechanism for challenging earlier provisions, regulations, instruments and policies under the Act on the grounds that they are no longer adequate. The Committee heard in evidence that at least one regulation is obsolete and therefore unenforceable. The Committee also notes that under the Ontario *Environmental Bill of Rights* (EBR), any two Ontario residents who believe that an existing policy, Act, regulation or instrument should be amended, repealed or revoked in order to protect the environment may apply to the Environmental Commissioner to have the impugned instrument reviewed by the appropriate minister. The *Environmental Bill of Rights*, however, precludes the review of matters decided within the past five years, unless the applicants can provide strong evidence that denying the review would pose serious risk of harm to the environment.

It is the opinion of the Committee that it would be useful to have such a mechanism in place under CEPA. It would ensure that the government is kept abreast of changing times and technologies. The availability of such a tool might also heighten public awareness and encourage members of the public to play a more active role in protecting their environment.

The Committee also notes that the Ontario EBR allows individuals to request a review regarding the development of a new policy, statute or regulation for substances deemed harmful to the environment. The Committee is not prepared to endorse such a far-reaching measure which might place undue demands on the staff and budget of Environment Canada and prevent the Department from dealing with its own priorities. However, as CIELAP recommended, there should be authority under the Act for members of the public to request a review in cases where a substance has been assessed as “toxic”, but for which controls have not been put in place within a reasonable period of time. Here again, the Committee considers that the public can play a useful role in ensuring that appropriate and *timely* action is taken.

There should also be an opportunity to challenge the removal of a substance from the Priority Substances List (PSL). As noted in Chapter 5, for 13 of the 44 substances on the first PSL there was “insufficient data for assessment” to determine whether they should be declared “toxic” or “non-toxic” under CEPA and, as a result, these substances were subsequently removed from the PSL by the Minister of the Environment and the

⁹ West Coast Environmental Law Association, *Ensuring Meaningful Public and Worker Involvement in Environmental Protection under CEPA*, Brief to the Committee, September 13, 1994, p. 24.

Minister of Health. There was, however, no opportunity to request a review of this decision, since the Act does not provide for a review in such cases.

In the Committee's opinion, the Ministers should not be allowed to "delist" a substance from the PSL without having to account for their action. In Chapter 5, the Committee has recommended that, in situations where there are insufficient data to make a definitive ruling on toxicity, it would be appropriate to invoke a "stop-clock" provision to allow the necessary information to be produced. In the Committee's opinion, CEPA should provide for a right of review when such a "stop-clock" provision is invoked, and when a substance is removed from the PSL prior to a decision being made regarding its toxicity.

Conversely, the Committee is not prepared to recommend that the *status quo* be modified by allowing a review of a decision under section 13 that a substance on the Priority Substance List is "toxic".

A decision that a particular substance is toxic and that its use should therefore be disallowed or controlled is not made lightly. A substance that has undergone an assessment may have taken months, perhaps even years, to complete. Thus, once the substance has been assessed as "toxic", such a ruling should stand. It should not be subject to further scrutiny. However, where a substance has been assessed as "not toxic", the Committee believes there should be one last opportunity for review by an impartial arbiter, unless the request is proven to be frivolous or vexatious. This is the current approach under the Act. It is in the best interests of the environment and should be retained.

The Committee recommended earlier that material improvements be made to the notice and comment provisions under CEPA to ensure that members of the public and other stakeholders have a reasonable opportunity to comment on all pending matters. A recommendation was also made that the Minister be required to consider all comments, and indicate how they were taken into account in the decision. In the Committee's view, these measures, if acted upon, will help to ensure that all concerns are duly considered in the decision-making process.

The Committee recommends that:

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- a) CEPA be amended to allow a notice of objection to be filed with respect to:
 - the addition of substances to the Domestic Substances List;
 - the removal of substances from the Priority Substances List before a determination is made with respect to their toxicity;
 - the waiving of information requirements;
 - the approval with conditions or when prohibitions or conditions regarding substances suspected of being "toxic" are varied or rescinded;

- the approval of field tests in relation to new substances, particularly those involving open release into the environment;
 - the issuance of an ocean dumping permit or a variation of its terms and conditions.
- b) CEPA be amended to require the Minister of the Environment to establish a Board of Review in the foregoing cases unless the Minister considers that the request for review is frivolous or vexatious.
- c) CEPA be further amended to allow two residents of Canada to request a review of existing policies, regulations or other instruments on the ground that they are inadequate, and the Minister should be required to accede to such requests provided the impugned policy, regulation or other instrument has been in place for more than five years and provided the Minister does not consider the request for review to be frivolous or vexatious.
- d) CEPA be further amended to enable two residents of Canada to request a review in relation to substances assessed as “toxic”, but for which regulations or other measures have not been promulgated within two years following completion of the toxicity assessment. The Minister should be required to accede to such a request for review unless he or she determines that the request is frivolous or vexatious.
- e) Where a request has been made for a review under parts a, c and d of this recommendation, the Minister should be required to respond formally to such requests within 60 days and provide written reasons if the request is disallowed on the ground that it is frivolous or vexatious.
- f) Parts a) through e) of this Recommendation should also apply to products of biotechnology, with all necessary adjustments made to take into account the different nature of those products.

THE NATIONAL POLLUTANT RELEASE INVENTORY

The National Pollutant Release Inventory (NPRI) was established by Environment Canada in 1993 and is the only publicly accessible national inventory in Canada providing information on releases and transfers of substances to air, water and land.

For the 1993 reporting year, the NPRI listed 178 substances about which specified information was required from facility owners or operators who annually used or produced a listed substance in amounts greater than 10 tonnes and in concentrations of more than 1 percent. There were , however, a number of exemptions. For example,

facilities with less than the equivalent of 10 full-time employees were exempt, regardless of the amount of listed pollutants they released.¹⁰

The NPRI is not expressly authorized under CEPA. Rather, the requirement to provide information is at present based on the Minister's power under section 16 of the Act to require that information be provided for the purpose of assessing the toxicity of a substance and determining appropriate control options.

By all accounts, section 16 provides a questionable legal basis for the NPRI. Furthermore, soliciting information by means of a notice in the *Canada Gazette* is regarded as an ineffectual way of informing small businesses, particularly, of the NPRI reporting requirements.

There is broad consensus that the NPRI should have an explicit legislative basis under CEPA. However, there is disagreement as to whether the program should be enshrined in its current form or be expanded to encompass additional reporting requirements — possibly along the lines mentioned in *Reviewing CEPA: An Overview of the Issues*, prepared by Environment Canada. This paper questioned whether, in furtherance of the community-right-to-know concept, there should be public access to information on “all aspects of the life cycle of a substance manufactured, processed, imported, produced as a byproduct, stored, used in a product, transferred to another place, or transferred to a recovery or waste disposal facility”.¹¹

Generally, industry is opposed to expanding the NPRI and urged that the *status quo* be maintained. The Canadian Chemical Producers' Association (CCPA), for example, although extremely supportive of the NPRI, argued against its expansion on a number of grounds. It suggested that in most cases reporting on all aspects of the life cycle of a substance would not have any relationship to whether or not environmental improvement was being achieved. The CCPA considered this to be a function of whether emissions for that substance were increasing or decreasing. The Association further stated that mandatory reporting on additional elements would make the inventory much less comprehensible to the public, and more costly and complex for both companies and government. The CCPA also expressed concern about the interface between increased reporting requirements and the confidentiality of business information.¹²

In contrast, environmentalists argued for an expanded base on the grounds that the NPRI should not only document the release of pollutants, it should also become an instrument for promoting pollution prevention.

¹⁰ Environment Canada, *Summary Report 1993, The National Pollutant Release Inventory*, Minister of Supply and Services Canada, 1995. This report contains data received as of April 15, 1995 for the 1993 reporting year and may be updated to incorporate subsequently received data.

¹¹ Environment Canada, *Reviewing CEPA: An Overview of the Issues*, 1994, p. 16.

¹² Canadian Chemical Producers' Association, *Responsible Care: A Total Commitment*, Brief to the Committee, September 1994, p. 18-19.

Earlier in this Report, the Committee took the position that CEPA should be transformed into a key federal mechanism for promoting pollution prevention in Canada. The Committee has also recommended several methods by which pollution prevention strategies could be incorporated under the legislation, notably through the mandatory development of pollution prevention plans for specified substances and the conferral of authority for sunseting substances deemed or found to be toxic.

The NPRI, in the Committee's view, could also play a vital role in the efforts to prevent pollution. In order to do so, however, changes would be required — notably with respect to more information on the life cycle of substances. Although tracking releases may be a useful way to gauge end-of-pipe solutions, it says nothing about whether "pollution prevention" strategies are being applied and, equally important, whether the generation and use — as opposed to release — of toxic substances is being reduced.

Many recommendations were made to the Committee to make the NPRI a more comprehensive and, hence, a more meaningful tool. It was suggested, for example, that like the U.S. Toxic Release Inventory (TRI), additional substances should be listed under the NPRI and the reporting thresholds lowered. The TRI, it should be noted, lists over 350 substances, compared to the 178 substances under the NPRI. Moreover, the TRI reporting threshold for chemicals used or produced is set at 10,000 pounds or 4.5 tonnes, in contrast to the NPRI threshold of 10 tonnes and 1 percent concentration.

The scope of the NPRI is, in contrast to the TRI, far more limited. Extremely toxic substances, such as furans and dioxins, were excluded from the Canadian inventory. Also excluded were substances that were already regulated, such as pesticides, and substances scheduled for bans or phase-outs, such as chlorofluorocarbons. These toxic substances, the Committee understands, were excluded because the multi-stakeholder advisory committee that was established to compile the list could not agree to their inclusion. The fact that such important substances have been excluded from the list is, in the Committee's opinion, both incomprehensible and unacceptable. If members of the public are to be informed of the substances that threaten their health and their environment, it is imperative that all such substances be duly reported.

In addition to expanding the list of reportable substances and lowering the thresholds, witnesses made a number of other recommendations to improve the NPRI and make it a meaningful pollution prevention tool. The suggested changes included:

- Base the exemption for small businesses on the absence of environmental significance of the substances used rather than on the size of the firm.
- Require the measurement of pollutants in the waste stream prior to their being treated, recycled or incinerated.
- Require both materials accounting (inflow, outflow and stocks of substances) and provision of information on, among other things, the maximum quantities of substances used, produced and/or stored at facilities.

- Require that specialized reporting regimes be developed with respect to key pollutants, such as pesticides, persistent and bioaccumulative toxic substances, ozone depleting substances and green house gases.

The Committee agrees with the foregoing recommendations. To this list could also be added a requirement to report detailed information about the type of pollution-prevention plans and other initiatives that a facility may have developed. The Committee also endorses the recommendation that the International Joint Commission (IJC) made in its last annual report that efforts be made to harmonize Canada's NPRI with the American TRI. As the IJC pointed out, residents on both sides of the Great Lakes should have information on the same pollutants that are of concern. Indeed, the broader the scope of the NPRI, the better informed Canadians will be about the pollutants to which they are exposed and the better they will be able to discern whether or not pollution prevention strategies are working or even being employed.

Indeed, the broader the scope of the NPRI, the better informed Canadians will be about the pollutants to which they are exposed and the better they will be able to discern whether or not pollution prevention strategies are working or even being employed.

In the opinion of the Committee the NPRI should have a statutory basis. Equally important, it should have the flexibility to become the foremost information tool for pollution prevention, where exceptions and thresholds should be kept to a minimum and gradually phased out.

The Committee agrees in principle with the consultative approach taken by Environment Canada in developing the NPRI. The use of a multi-stakeholder advisory committee, where industry, environmental and labour organizations and the two levels of government come together to exchange views and make recommendations, has considerable merit. While the first round of consultations was disappointing because it was based on consensus and thus left out too many substances of concern, the Committee is satisfied that, with the NPRI firmly entrenched in the legislation, this problem will not reoccur. The Committee believes that the Minister would benefit from the advice of a multi-stakeholder committee, particularly if the terms of reference were clearly set out in the legislation.

RECOMMENDATION

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The Committee recommends that CEPA be amended to:

- a) give the National Pollutant Release Inventory (the NPRI) an explicit statutory basis.
- b) require that detailed information be provided under the NPRI in relation to the pollutants released into the environment; the pollutants

released into the waste stream prior to their being treated, recycled or incinerated; the pollutants transferred off-site for treatment, storage or disposal; the quantities of pollutants generated, used and stored at facilities; and the details of the pollution-prevention initiatives undertaken with respect to the listed pollutants, including pollution-prevention plans, source reduction strategies, etc.

- c) require specialized reporting regimes in relation to key pollutants, such as pesticides, persistent and bioaccumulative toxic substances, ozone depleting substances and climate change gases.

The Committee further recommends that

- a) the exemption for small businesses be based on the absence of environmental significance of the substances used rather than on the size of the firm, that the reporting threshold be lowered to 4.5 tonnes and that all other exemptions be kept to a minimum and gradually phased out.
- b) As far as possible the NPRI be harmonized with the American Toxic Release Inventory (TRI).
- c) The NPRI be compiled and published annually, and that the NPRI requirements be revised and updated every three years.
- d) An advisory committee, comprising representatives from industry, labour, the environment, Aboriginal peoples and the two levels of government, be established to advise the Minister on the changes that should be made to the NPRI within the parameters of the foregoing terms of reference.

CONFIDENTIALITY OF INFORMATION

Section 19 of CEPA entitles a party submitting information to the Minister under Part II, or to a board of review where a notice of objection has been filed under Part II, to request in writing that the information provided be treated as confidential. Where such a request is made, section 20 requires that the information not be disclosed, unless its release is permitted pursuant to one of the criteria set out under this section.

A number of problems have been identified with respect to CEPA's confidentiality provisions. The term "confidential" is not defined; no mechanisms other than the *Access to Information Act* exist to adjudicate disputes regarding claims for confidentiality; and, although regulations can be made under section 22 requiring that information in support of a claim for confidentiality be provided, none has been made.

It appears that if a request for confidentiality is made with respect to information submitted under the NPRI, Environment Canada treats the information as confidential unless, pursuant to a request made under the *Access to Information Act*, the Information Commissioner recommends its release.¹³

There is considerable concern that, unless improvements are made to the confidentiality provisions under CEPA, the purpose of the NPRI could be subverted.

There is considerable concern that, unless improvements are made to the confidentiality provisions under CEPA, the purpose of the NPRI could be subverted. For example, the West Coast Environmental Law Association stated:

Current provisions in CEPA regarding confidential information pose a significant obstacle to public access to [NPRI] information. For instance, despite the fact that all stakeholders involved in negotiations regarding the content of the NPRI agreed that it should be a publicly accessible data base, CEPA and the Access to Information Act create a mechanism whereby information can be kept confidential on arbitrary grounds. A business with an environmental record of dangerous releases, that is required to report these releases under NPRI, can request that the information be kept confidential. The business can even claim that its name and location is confidential and it is not required to give any reasons as to why the information should be kept confidential. [. . .] Likely, most businesses will not abuse the confidentiality provisions in CEPA. However, even if only a small minority of businesses do abuse the provisions, it will likely be those with the worst environmental records that try to hide them from the public.¹⁴

Environment Canada's Issues Paper # 9, *Community Right to Know*, indicates that claims for confidentiality were submitted by approximately 10 percent of the more than 1,100 facilities that filed reports under the NPRI. By comparison, confidentiality claims in the United States are granted for fewer than 10 of the more than 22,000 reports filed each year.¹⁵

Issues Paper #9 outlines some of the features of the confidentiality provisions under the U.S. Toxic Release Inventory (TRI):

¹³ Environment Canada, *Reviewing CEPA, The Issues #9, Community Right to Know*, Minister of Supply and Services, 1994, p. 10-11.

¹⁴ West Coast Environmental Law Association, *Ensuring Meaningful Public and Worker Involvement in Environmental Protection under CEPA*, Brief to the Committee, September 13, 1994, p. 7-8.

¹⁵ Environment Canada, *Reviewing CEPA, The Issues #9, Community Right to Know*, Minister of Supply and Services, 1994, p. 11. Based on data provided in the NPRI summary report for 1993, about 130 Canadian companies actually requested confidentiality. The report indicates, however, that once they were informed of the criteria for confidentiality under CEPA and the *Access to Information Act*, most facilities withdrew their request. At the time of the report's printing, the Access to Information Secretariat had accepted four claims for confidentiality, while a fifth claim remained unresolved: Environment Canada, *Summary Report 1993, The National Pollutant Release Inventory*, Minister of Supply and Services Canada, 1995, p. 2.

- The TRI allows withholding information **only** in relation to the specific chemical identity of a release, and where information is withheld, it requires that information of the generic class of the release be provided.
- The TRI requires justification for confidentiality to be made at the time the request for confidentiality is made.
- The test for confidential information is much tighter under the TRI, requiring the facility requesting confidentiality to show that it has taken reasonable measures to keep the information confidential, that the information is likely to cause substantial harm to its competitive position, and that a substance's chemical identity is not readily discoverable through reverse engineering.
- Frivolous confidentiality claims are subject to penalties of \$25,000 per claim. (p. 12)

Many environmental groups have urged that CEPA be revised to ensure that claims of confidentiality do not block meaningful public access to information. The Committee agrees. If the public is to play a role in protecting the environment, it must have the information at hand to do so. In the opinion of the Committee, information should be withheld only under compelling circumstances.

The Committee notes that confidentiality provisions similar to the TRI provisions were adopted in Canada under the Workplace Hazardous Materials Information System (WHMIS), which, as mentioned earlier, is a federal/provincial initiative to protect workers by informing them of the chemical hazards in the workplace. Under the WHMIS, specific criteria are established for judging confidentiality, confidentiality cannot be claimed for some information, and evidence supporting confidentiality must be supplied at the time the claim for exemption is made. This system is also unique in that it provides for an independent commission to review confidentiality claims.

The confidentiality provisions under WHMIS could serve as a useful model for CEPA. It might even be possible to expand the mandate of the Hazardous Materials Information Review Commission to examine confidentiality claims submitted under CEPA. On the other hand, a comparison could be made of the confidentiality provisions prescribed under WHMIS and under the TRI, and the best of both regimes incorporated under CEPA. This option should be explored more fully. At a minimum, however, the Committee believes that the public disclosure provisions under CEPA must be broadened, and that the circumstances under which claims for confidentiality can be made and sustained must be narrowed.

The Committee recommends that the disclosure provisions under CEPA be strengthened by providing a narrow definition for the term “confidential”; requiring that claims for confidentiality be accompanied by supporting evidence; specifying the types of information for which confidentiality claims cannot be made; providing a review process for claims of confidentiality; and by making it an offence to make a frivolous claim, punishable by a fine of up to \$25,000.

RECOMMENDATION
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WHISTLEBLOWER PROTECTION

CEPA encourages the voluntary reporting of unauthorized releases by protecting the identity of “whistleblowers” who request anonymity. If the whistleblower is a federal employee, he or she is also protected against being dismissed, disciplined or harassed in the workplace for reporting an incident. It is widely recognized, however, that the whistleblower provisions under sections 37 and 58 of CEPA are deficient in a number of material respects.

- Protection applies only to the release or likely release of a substance specified on the List of Toxic Substances under Schedule I of the Act, or to the release or probable release of a substance contrary to the regulations made pursuant to Part IV (the Federal House). Thus, no protection is afforded in relation to other violations under the Act, such as producing laundry detergents containing more than the allowable limit of phosphates (a Part III violation), or dumping at sea without a permit or in contravention of the terms of the permit (a Part VI violation).
- Protection appears to apply only if the report is made to a CEPA “inspector” or “to such other person as is designated by regulation”. Since no regulations have been made to this effect under sections 38 and 59 of the Act, it therefore seems that CEPA does not protect whistleblowers who report an incident to the police, a provincial or territorial environmental officer, a supervisor or the media.
- Protection is not extended to all employees in the federal sphere, but only to those working for a “department, board, commission or agency of the Government of Canada, or of a corporation named in Schedule III of the *Financial Administration Act* or of a federal regulatory body”. Thus, the employees of “unlisted” federally-regulated enterprises do not benefit from this protection, nor do contractors working for the federal government.
- Protection extends only to those who report the incident and not to those who are considering or who propose to do so.

Several witnesses recommended that CEPA’s whistleblower protection be strengthened. The Environmental Law Section of the Canadian Bar Association made this observation:

With scarce resources, the enforcement of environmental legislation depends on the community being able to monitor and report incidents and on employees, in particular, being able to report incidents without fear of being dismissed from their jobs or other punitive action being taken against them.¹⁶

The Committee fully agrees. As stated in the introduction to this chapter, the government alone cannot protect the environment; the public must also give a hand.

¹⁶ The Environmental Law Section of The Canadian Bar Association, Brief to the Committee, December 1994, p. 35.

When employees or members of the general public voluntarily report an infraction, they must be applauded for taking action and not placed at risk for having done so. Improved whistleblower protection must be available to them.

When employees or members of the general public voluntarily report an infraction, they must be applauded for taking action and not placed at risk for having done so. Improved whistleblower protection must be available to them.

The Committee recommends that:

**RECOMMENDATION
116**

- a) A general whistleblower protection provision be added under Part VII of CEPA to protect from disclosure the identity of all persons who, in good faith, report or propose to report any offence or violation under the Act or regulations, or likely or probable offence or violation under the Act or regulations, if such persons request anonymity.
- b) CEPA be further amended to protect all federally-regulated employees from being dismissed, harassed or disciplined in the workplace for reporting in good faith any offence or violation under the Act or regulations, or likely or probable offence or violation under the Act or regulations, or who propose to do so.
- c) CEPA be further amended to provide that the foregoing protection be granted to persons or employees who, in good faith, make their report or propose to make their report to someone other than a CEPA inspector.

THE RIGHT OF CITIZENS TO REQUEST AN INVESTIGATION

Section 108 of CEPA entitles any two Canadian residents who are 18 years of age or more to apply in writing to the Minister of the Environment for an investigation of an offence they believe has been committed and, pursuant to section 109, the Minister has 90 days within which to provide the applicants with a status report and indicate what, if any, action is proposed.

The right to request an investigation is a useful mechanism since it allows members of the public to take action to protect the environment without having to launch proceedings themselves. In practice, however, this remedy has proved disappointing. According to Paul Cuillerier, formerly with Environment Canada's Office of Enforcement, only six official requests have been made under section 108 since CEPA came into force, and five of these were not directly related to CEPA (34: 89).

The right to request an investigation is a useful mechanism since it allows members of the public to take action to protect the environment without having to launch proceedings themselves. In practice, however, this remedy has proved disappointing.

Various theories have been advanced to explain why this remedy has not been invoked more often. Meinhard Doelle of the law firm of Stewart McKelvey Sterling Scales offered this explanation at the Halifax roundtable:

When you look at the various sections of CEPA, they're not conducive to involvement of the general public. Who is going to observe ocean dumping? Who is going to be able to observe something that is a violation of Part II of CEPA, dealing with toxic substances? Who is going to be able to go through the Domestic Substances List and so on to determine whether CEPA has been violated? Who's going to be able to identify a new substance that comes into Canada and decide that CEPA has been violated and an investigation is warranted? I think those are the reasons Section 108 hasn't been used. [...] I don't think there's any problem with the way Section 108 is worded. If there are problems, one is making people aware of the fact it exists. The other much more important part is people have to know and understand what it means to be in compliance with CEPA. (56:30 and 32)

The Committee is inclined to agree with Mr. Doelle. With the possible exception of ocean dumping, CEPA offences typically are not highly visible and are therefore not readily identifiable. This being the case, the Committee questions whether a publicity campaign on this remedy would be worthwhile. Even if members of the public were made aware of section 108, it does not follow that they would be better able to detect that their laundry detergent contains an excess amount of phosphates. Nonetheless, it might be useful if a pamphlet to educate the public on CEPA were developed and the right to apply for an investigation under section 108 were highlighted.

Under some provincial environmental laws, requests for an investigation can be made by a single resident, in contrast to the two required under CEPA. This might be a possible solution. However, as discussed further in Chapter 16, section 34(6) of CEPA requires, as a condition for signing an equivalency agreement with the provinces, that provisions similar to sections 108 and 109 be included in the provincial environmental legislation.

The CEPA Evaluation Report indicated that this condition had been a stumbling block to the signing of equivalency agreements: "The requirement that citizens' complaints be investigated as a matter of law rather than policy (Sections 108 and 109) needs to be rethought, given [...] the obstacle that it poses to the successful

negotiation of equivalency agreements.”¹⁷ If section 108 were changed to allow a single resident to request an investigation, the Committee believes that such a change could further jeopardize the successful negotiation of equivalency agreements. The Committee therefore considers such a change to be ill-advised.

However, La Société pour Vaincre la Pollution (SVP) suggested a number of improvements regarding this remedy, namely that section 109 be amended to ensure that a report be provided to the persons requesting the investigation, whether or not legal action is taken. It also suggested that a form be developed to facilitate applications and that Environment Canada offices across the country provide assistance in drafting requests and have on hand employees authorized to take oaths or affirmations, since section 109 requires that the application be accompanied by a solemn or statutory declaration.¹⁸

The Committee agrees with these practical suggestions, which complement the suggestion made earlier that a pamphlet on CEPA be developed. These steps would facilitate the making of an application and might even increase recourse under this remedy.

The Committee recommends that:

RECOMMENDATION

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- a) **Environment Canada publish a pamphlet on CEPA to educate members of the public on the purposes of the Act and to inform them of the rights and remedies provided to them under the Act, including the right of residents under section 108 to request an investigation of a suspected violation.**
- b) **Section 109 of CEPA be amended to require that the Minister provide a detailed final report to the applicants, whether or not legal action has been taken.**
- c) **Environment Canada develop a form for applications under section 108 and that applicants be provided, on request, with assistance in drafting their “application” and with the services of a swearing-in officer.**

¹⁷ Environment Canada, *Evaluation of the Canadian Environmental Protection Act, Final Report*, 1993, p. 106.

¹⁸ Société pour vaincre la pollution (SVP), Brief to the Committee, October 19, 1994.

THE RIGHT OF CITIZENS TO SUE

In *Creating Opportunity*, the Liberal Party indicated that:

We will use the forthcoming review of the Canadian Environmental Protection Act to examine giving members of the public access to the courts as a last recourse if the federal government persistently fails to enforce an environmental law.¹⁹

The Committee welcomes this opportunity to recommend that the remedies available to Canadians for violations under the Act be broadened. As discussed below, the existing remedies are too few and too restrictive. They must be strengthened if Canadians are to be encouraged to take an active part in protecting their environment.

Section 136 of CEPA currently permits individuals to sue for loss or damage suffered personally by them as a result of conduct contrary to the Act or regulations. It also allows them to seek an injunction where they have suffered or are about to suffer loss or damage by reason of such conduct. In both cases, the complainants are entitled to compensation for the costs of investigation.

...the existing remedies are too few and too restrictive. They must be strengthened if Canadians are to be encouraged to take an active part in protecting their environment.

A number of criticisms have been levelled against this section, which is perceived as being far too restrictive. One important limitation concerns the requirement that the loss or damage has been suffered by reason of "behaviour that is contrary to any provision of this Act or the regulations". The problem with this requirement is that it precludes recovery in cases where the injurious activity was authorized under the Act or regulations. Thus, if damage results from activities carried out under an ocean dumping permit, the person who has sustained the loss or damage has no recourse under this section, since the injurious activity was not *contrary* to the Act, but was, in fact, specifically *authorized* under the Act.

The authors of the CEPA Evaluation Report took issue with this restriction. Recognizing that damage might occur to private property even if the dumping was legal, they recommended that CEPA be amended to provide a mechanism to compensate those who were adversely affected by the activity. They also questioned whether some of the current problems could be allayed by involving potentially affected communities in the overall planning process for selecting appropriate dump sites.²⁰ These recommendations, however, were rejected by Environment Canada in its response to

¹⁹ Liberal Party of Canada, *Creating Opportunity, The Liberal Plan for Canada*, 1993, p. 69.

²⁰ Environment Canada, *Evaluation of the Canadian Environmental Protection Act, Final Report*, 1993, p. 76.

the CEPA Evaluation Report. The Department indicated that there was no need for a new mechanism under CEPA since section 71(1)(d) already calls for public involvement in the evaluation of applications for permits. It also stated there was no record of approved ocean disposal having caused adverse affects on those using areas adjacent to ocean disposal sites.²¹

The Committee does not agree with Environment Canada's reasoning. In the opinion of the Committee, the fact that an application for dumping must be advertised in the local newspaper pursuant to section 71(1)(d) does not guarantee that damages will not be sustained if the application is authorized. Such an advertisement only alerts the community to the proposed dumping and, even if the members of the community do not oppose the application at the time, their failure to do so should not preclude a person who has sustained loss or damage from obtaining compensation.

The fact that damage has not been sustained *in the past* is also irrelevant. What is important is that damages *might* be sustained *in future* and, if they are, the victim should have a means of redress. Why should the victim have to pay in such cases, and not the polluter? Should the remoteness of the risk of damage dictate whether or not a remedy should be made available? The Committee thinks not. In keeping with the polluter-pays principle, the Committee believes that a remedy should be available *should* damage ever occur.

It may be that allowing the victim to sue for damages is not the best solution to resolving damage claims in such cases. The CEPA Evaluation Report did not specifically recommend that the Act be amended to this end. It indicated that direct negotiation or mediation might provide an appropriate solution. The Committee does not favour any particular remedy. What is at issue is that those who have sustained loss or damage be provided with an effective means of redress.

The Committee recommends that a mechanism be provided under CEPA to compensate any person who has suffered loss or damage as a result of activities authorized under the Act.

**RECOMMENDATION
118**

Section 136 contains a further limitation in that that it provides a cause of action only to individuals who have *personally* sustained loss or damage. Individuals who are simply concerned about protecting the environment against unauthorized actions have no recourse under CEPA. The Minister alone is authorized under section 135 to obtain an injunction to put a stop to injurious activities. Citizens cannot obtain an injunction, unless, of course, they have personally sustained loss or damage.

Even where individuals have suffered loss or damage, under section 136 they are only entitled to recover an amount equal to the loss or damage sustained, plus the costs of investigation. The recovery allowed does not extend to damages to the environment in general. Section 130(1) authorizes the court to order that compensation be paid to the

²¹ Environment Canada, *Response to the CEPA Evaluation Report*, March 14, 1995, p. 14.

government for any preventive or remedial action taken. This measure, however, does not apply to civil suits. It applies only where the polluter has been *convicted* of an offence under CEPA.

Given the limited remedy afforded individuals under section 136, many environmental groups have urged that “citizen suits” be permitted under CEPA.

As its name implies, a citizen suit provision authorizes any “citizen” to “sue” a party who has violated an environmental standard, approval or order. Although most citizen suit regimes limit the relief that can be ordered by the court to an injunction or a declaration regarding the legality of a given law or activity, some regimes permit the court to make a monetary award, which is normally paid to the public treasury.

Citizen suit provisions are now quite common in the United States and are an emerging phenomenon in Canada. The Ontario *Environmental Bill of Rights* (EBR), for example, creates a cause of action that closely parallels the various American citizen suit provisions.

Citizens who witness or become aware of actual or imminent violations under the Act should be allowed to step in and protect their environment. A citizen suit provision would allow them to do so, irrespective of whether they have personally suffered loss or damage. If such a measure were enacted, it would foster greater public participation. It might also lessen the burden for government and even prod public authorities to enforce the law with increased zeal.

Section 84 of the EBR authorizes any resident of Ontario to commence proceedings against a party who, having violated a law, regulation or other instrument, has caused “significant harm to a public resource of Ontario” (section 84). Proceedings under this section are also allowed in relation to “imminent” violations that will “imminently cause significant harm”. A would-be plaintiff, however, cannot initiate an action unless he or she first requests an investigation of the alleged violation. Notice must also be given to the Attorney General and, to underscore the “public interest” feature of this remedy, the plaintiff is precluded from collecting damages or otherwise benefitting directly from the lawsuit.

The Committee supports the inclusion of a citizen suit provision under CEPA. Citizens who witness or become aware of actual or imminent violations under the Act should be allowed to step in and protect their environment. A citizen suit provision would allow them to do so, irrespective of whether they have personally suffered loss or damage. If such a measure were enacted, it would foster greater public participation. It might also lessen the burden for government and even prod public authorities to enforce the law with increased zeal.

While the Committee endorses the inclusion of a citizen suit provision, it recognizes that there is potential for abuse. Some safeguards therefore seem warranted — not to interfere unduly with the rights of citizens to take action, but to provide some measure of protection to would-be defendants.

The Committee recommends that:

RECOMMENDATION**119**

- a) **CEPA be amended to permit citizen suits that would entitle any person to commence a civil action against a party who has violated, or is about to violate, a provision of the Act or regulations, the breach of which has resulted in, or could result in, significant harm to the environment.**
- b) **Civil suits be allowed to proceed only if an application requesting the investigation of the alleged offence has first been made under section 108 of the Act, and the court determines that the Minister took an unreasonable amount of time to respond to the request or that the Minister's response was unreasonable.**
- c) **The plaintiff be required to serve notice of the action on the Attorney General for Canada, who may be made a party to the action.**
- d) **Where the action succeeds, the Court be empowered to order an injunction against the defendant or order the defendant to take remedial action, order the parties to negotiate a restoration plan, order the defendant to pay damages into the special environmental fund to be established under CEPA, and order the partial or full recovery of the plaintiff's costs.**

While citizen suits should prove a useful additional tool, this remedy, like other civil remedies, is premised on causing harm or the likelihood of causing harm.

Stressing the difficulties of proving causation in environmental cases (i.e., proving that the defendant's action caused the harm shown), the West Coast Environmental Law Association (WCELA) observed that traditional rules of tort law limit the plaintiff's ability to recover damages for personal injury where it can be proved that a defendant only increased the risk of injury, but did not actually cause the damage. WCELA noted in this regard:

If the defendant causes the plaintiff to incur a risk of harm, but harm does not happen (or cannot be proven) then there are no damages, at law, and thus, no remedy. For example, if the defendant puts three bullets and three blanks in a six-shooter gun, spins the barrel, points the gun at the plaintiff, pulls the trigger, and draws a blank, then the law has been that there is no harm, therefore, no damages and no remedy. Creative judges have now made an "exception that proves the rule," by finding in some cases that the defendant

in a situation like this caused the plaintiff to suffer "nervous shock," allowing an award of damages even if no other harm was done.²²

The Committee agrees that the current procedural rules governing tort law placing the onus and burden of proof on the party alleging injury can deny plaintiffs recovery in cases involving toxic substances. In some cases, a victim may be able to demonstrate that his or her injury was caused by a particular substance, but may be unable to prove which producer or user of the substance was responsible for the exposure. In other cases, it may be possible to demonstrate that a particular defendant has created a risk to a general population, but it may be impossible at that time to identify the future victims (e.g., by dumping a toxic substance in a river, the defendant has increased the risk that some of the women living downstream will have children with birth defects). In other cases, the victim may only be able to demonstrate that the defendant's substance *might* have caused her injury.

Exposure to toxic substances has the potential to cause a broad range of physical harm, including cancer, genetic mutations, central nervous system disorders, fetal and birth injuries, lung disease and sterility. A tremendous difficulty that must be confronted by litigants in these cases is the fact that virtually all of the adverse health effects are also caused by natural events and that science does not sufficiently understand the etiology of many diseases to allow a court to distinguish between a disease caused by a toxic substance and the same disease caused by exposure to the normal background elements of daily life. In many cases, toxicologists and epidemiologists are able to provide only statistical, probabilistic statements, often with wide margins of error. As a result, litigants encounter virtually insurmountable hurdles when forced to prove causation using toxicological or epidemiological test results.

Exposure to toxic substances has the potential to cause a broad range of physical harm, including cancer, genetic mutations, central nervous system disorders, fetal and birth injuries, lung disease and sterility. A tremendous difficulty that must be confronted by litigants in these cases is the fact that virtually all of the adverse health effects are also caused by natural events and that science does not sufficiently understand the etiology of many diseases to allow a court to distinguish between a disease caused by a toxic substance and the same disease caused by exposure to the normal background elements of daily life.

The Committee believes that by denying recovery in toxic tort cases, the effect of these procedural rules undermines the basic principles of tort law. A primary function of tort law is to compensate victims. However, in each of the above situations — where the precise defendant cannot be identified, where the future victims cannot be

²² West Coast Environmental Law Association, Ensuring Meaningful Public and Worker Involvement in Environmental Protection under CEPA, Brief to the Committee, September 13, 1994, p. 21.

ascertained and where the traditional “proof” cannot be demonstrated beyond probabilistic evidence of increased risk — an injured party would be denied compensation.

A second goal of tort law is to deter socially unacceptable behaviour. Yet, again, in each of the foregoing circumstances, a party who released a toxic substance into the environment and who increased the risk of injury to others would be held *not* liable to compensate those injured if they failed to prove causation.

Finally, the Committee believes that there is an important element of fairness that needs to be addressed. As one commentator recently wrote:

The rules governing onus and proof were developed to protect individual rights and liberties. Therefore, traditional dispute resolution mechanisms presume that lack of proof of guilt (harm) means probable proof of innocence (safety). Society accepts the potential for error when resolving traditional disputes (better than 100 guilty go free than one innocent be convicted) because high priority is placed on individual liberty. But when managing toxic chemicals, the primary concern for society must be with public health, not individual liberty or corporate growth. When assessing environmental risk problems, it would be absurd to adopt the proposition that it is better to have 100 harmful chemicals declared safe than one safe chemical declared harmful. When dealing with environmental risks, the inability to prove injury must not be viewed as presumptive for safety. The evidence that is unequivocal or unavailable today may prove at some future date to have caused harm. And, in accordance with the characteristics of an environmental risk activity, the harm, if it does materialize will be serious and irreparable. Thus, policy considerations dictate that, in appropriate circumstances, a toxic tort litigant should not be precluded from a remedy because, through no fault of his or her own, he or she cannot meet the standards which were established for faster social policy goals different from the goals that are sought to be preserved in toxic tort litigation.²³

Reflecting these concerns, the WCELA recommended that consideration be given to the creation of a remedy for the creation of environmental risk, where the damages would be proportional to the increased risk caused by the defendant, and in which, once a plaintiff had presented a *prima facie* case demonstrating that the defendant had caused the environmental risk complained of, the onus would be placed on the defendant to disprove causation of injury to the plaintiff.

The Committee is unaware of having received any other submissions on this issue. However, because the revisions to CEPA should be framed to meet future challenges as well as those of today, the Committee believes that this issue should be explored further.

The Committee recommends that the federal government be encouraged to provide in CEPA a civil remedy for the creation of environmental risk, where the

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²³ Hajo Versteeg, “The Conflict of Law and Science,” in Cote, R.D., Russell and D. VanderZwaag, eds., *Law and Environment: Problems of Risk and Uncertainty*, Canadian Institute for the Administration of Justice, 1993, pp. 210-234, at p. 229.

measure of damages would be proportional to the increased risk caused by the defendant, and in which, once a plaintiff had presented a *prima facie* case demonstrating that the defendant had caused the environmental risk complained of, the onus would be placed on the defendant to disprove causation of injury to the plaintiff.

THE RIGHT OF CITIZENS TO PROSECUTE

Pursuant to sections 504, 785 and 788 of the *Criminal Code*, citizens have the right to undertake a private prosecution. However, they may not be able to see the prosecution through, because of the intervention of the Attorney General for Canada, either by taking over the prosecution or by ordering that it be stayed.

Private prosecutions are rare in general and rarer still with respect to environmental offences, given that environmental offences are difficult to prove and the standard of proof in criminal prosecutions is proof “beyond a reasonable doubt”. The civil standard of proof is, in contrast, proof “on the balance of probabilities” and is therefore a less onerous standard.

If a citizen suit provision is enacted, there is less likelihood of a need to undertake a private prosecution. However, in the case of a flagrant or serious violation, proceeding under civil law may be considered inadequate and, if for whatever reason, the government has failed to prosecute, a citizen should be able to do so.

Many environmental groups recommended that the private prosecution provisions of CEPA be strengthened, notably by allowing the court to award to the private prosecutor one half of the fine imposed upon conviction.

The Committee agrees that the private prosecution provisions should be strengthened, but not in the manner suggested above. The Committee opposes fine-splitting. In the Committee’s view, citizens should be motivated, not by the prospect of receiving a share of the monetary penalty imposed, but by protecting the environment.

In the chapter on enforcement, the Committee recommends that the courts be empowered to order that the fines imposed be paid, in whole or in part, into a special environmental fund. A similar recommendation was also made earlier in relation to damage awards resulting from citizen suits. The Committee prefers that fines be disposed of in this manner, rather than to the personal benefit of the private prosecutor. The Committee also recommends in Chapter 15 is that the court be empowered to order the recovery of the costs incurred in the investigation and prosecution of offences under the Act. This recommendation, the Committee believes, should provide a sufficient incentive for citizens to undertake a private prosecution in appropriate cases.

While the Committee opposes fine-splitting, it does agree with the recommendations made by the Canadian Institute for Environmental Law and Policy

that when the Attorney General takes over a prosecution, the citizen who launched the prosecution should be entitled to remain a party to the proceedings and, if the Attorney General opts to settle the case out of court, the citizen should have the right to participate in the negotiations and be made a party to any agreement reached.²⁴

Since these changes cannot conveniently be made under the *Criminal Code*, CEPA should be amended to this end.

The Committee recommends that:

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- a) CEPA be amended to permit citizens to undertake a private prosecution.
- b) CEPA be further amended to provide that if the Attorney General decides to pursue a prosecution initiated by a citizen, the citizen be entitled to remain a party to the proceedings and, if the Attorney General decides to settle the case out of court, the citizen be entitled to participate in the negotiations and be made a party to the agreement.

THE CREATION OF AN ENVIRONMENTAL FUND

Numerous witnesses emphasized to the Committee that the government must develop new methods to finance and deliver its environmental protection responsibilities. In addition to the various provisions recommended throughout this Report which place the responsibility on producers and importers of potentially toxic substances to ensure public and environmental safety, the Committee believes that producers and importers of substances regulated under CEPA should also share the cost of administering CEPA and of responding to emergencies caused by those substances. To that end, the Committee believes that CEPA should require the creation of an environment fund, which could be used for such purposes as providing participant funding (discussed in the next section), improving monitoring, inspection and enforcement and other acts related to the administration of CEPA, and which would be financed by the various fees and fines imposed or collected under the Act.

In the Committee's view, such a fund could be modeled on Alberta's Environmental Protection and Enhancement Fund. Established by the *Alberta Environmental Protection and Enhancement Act*, the fund is financed by money recovered by the government from parties responsible for emergencies and by money received as fees and levies. Subsection 28(2) of the Alberta Act requires that the fund be used "for the purposes of environmental protection and enhancement and emergencies with respect to any matter that is under the administration of the Minister." Particularly in the light of the budget cuts at Environment Canada, the Committee believes the creation of an environmental fund would be extremely beneficial.

²⁴ Canadian Institute for Environmental Law and Policy, *Reforming the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, p. 6.

The Committee recommends that:**RECOMMENDATION****122**

- a) **CEPA require the creation of an environmental fund to be used for a variety of environmental protection activities, including the remediation of environmental emergencies covered under CEPA; the remediation of contaminated sites on federal lands; and the provision of financial assistance to groups and individuals under the proposed participant funding program.**
- b) **The fund be administered by Environment Canada and financed by the penalties, fines, fees and levies imposed under CEPA, as well as the monetary awards granted under the proposed citizen suit provisions.**

PARTICIPANT FUNDING

CEPA does not, at present, require participant funding. The Committee received representations from a considerable number of witnesses that such funding should be provided under the Act. For example, the Canadian Institute of Environmental Law and Policy (CIELAP) stated:

The Board of Review provisions of CEPA currently provide for final and interim cost awards. However, there are no provisions for the provision of intervenor funding to bona fide public interest intervenors in Board of Review proceedings. This represents a serious barrier to the use of the Board of Review process by members of the public. Boards of Review are likely to involve complex technical, scientific and legal issues. Consequently, public interest intervenors may require legal and expert assistance to participate effectively in their proceedings. The need for intervenor funding in public hearing and inquiry processes is well-established, and numerous examples of intervenor funding arrangements exist under federal and provincial legislation, including the Canadian Environmental Assessment Act and the Ontario Intervenor Funding Project Act.²⁵

The lack of funding opportunities in Canada and in the Atlantic provinces particularly, was cited in Environment Canada's Issue Paper #10, *Public Participation for Environmental Protection*, as the primary reason given by the public for not effectively challenging government decision-making on environmental issues. Lack of funding was registered as a concern, not only with respect to access to the courts, but also regarding the capability of public interest groups to participate effectively at public hearings.

The authors of the CEPA Evaluation Report made similar observations. To ensure a more balanced input between the parties, they recommended that Environment Canada consider supporting intervenors to ensure that a full spectrum of interests are

²⁵ Canadian Institute for Environmental Law and Policy, *Reforming the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, Appendix 3, p. 12.

represented during the CEPA consultation process.²⁶ In its response to the Report, Environment Canada pointed out that this recommendation was in keeping with the Department's views and actions, and that funding has been and continues to be provided through a number of activities.²⁷

The Committee congratulates the Department for providing participant funding on a voluntary basis. However, the Committee does not believe that discretionary funding is sufficient. It would be far preferable, the Committee believes, if the establishment of a participant funding program were required under CEPA. If members of the public are to be encouraged to participate in the decisions that affect their health and the environment, they should be provided with some measure of financial assistance to enable them to take advantage of available rights and remedies. We further believe that the special environmental fund outlined in the previous section should be used to provide financial assistance to participants.

If members of the public are to be encouraged to participate in the decisions that affect their health and the environment, they should be provided with some measure of financial assistance to enable them to take advantage of available rights and remedies.

The Committee notes that, with the passage of Bill C-56 last December, a participant funding program is now required under the *Canadian Environmental Assessment Act*. The Committee believes that such a requirement should also be made under CEPA, and that it should include a provision for "up front" funding in appropriate cases.

The Committee recommends that CEPA be amended to require the establishment of a participant funding program, including a provision respecting interim funding, that would be funded from the monies in the environmental fund to be established under CEPA.

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AN ENVIRONMENTAL BILL OF RIGHTS

The Committee has made a number of recommendations in this Report, and in this chapter particularly, that commonly relate to community-right-to-know and environmental bill of rights legislation. Given its mandate to review the provisions and operations of CEPA, the Committee has not ventured so far as to provide detailed recommendations about the enactment of a comprehensive bill of rights that would apply to all federal laws relating to the environment. The Committee does, however,

²⁶ Environment Canada, *Evaluation of the Canadian Environmental Protection Act, Final Report*, 1993, p. 99.

²⁷ Environment Canada, *Response to the CEPA Evaluation Report*, March 14, 1995, p. 5.

strongly support the enactment of such legislation at the federal level. Thus, the recommendations made in this chapter should be regarded as short-term improvements. In the Committee's opinion, in the long term, a more ambitious legislative reform should be undertaken to provide Canadians and Canadian workers with a federal bill of environmental rights.

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The Committee recommends that the Government of Canada develop comprehensive federal legislation respecting the environmental rights of Canadians and Canadian workers.

ENFORCEMENT

INTRODUCTION

Legislation and regulation are only as good as their enforcement. Canadians must be assured that environmental regulations are followed. Firm, fair and consistent enforcement also ensures that good environmental citizens are not penalized by the environmentally abusive acts of others.¹

The Committee agrees fully with this statement made by Environment Canada in one of its annual reports on CEPA. Unfortunately, the Department's enforcement practices have not conformed to their stated objectives. Enforcement action remains uneven across the country and offenders are not being brought to justice in all cases where firm action is warranted. In the circumstances, whether "good environmental citizens" are being treated "fairly" is highly questionable.

In the Committee's opinion, Environment Canada's disappointing enforcement record is attributable to a number of factors. The Department's official enforcement policy, which speaks in terms of strict compliance, is at odds with the Department's operational emphasis on *compliance promotion* through less adversarial means. Also, the regionalization of enforcement decisions appears to have blurred the chain of command and resulted in inconsistent decisions between regions. There are, in addition, too few enforcement personnel and the range of enforcement powers and enforcement options is too restricted.

This chapter examines these, and other enforcement issues, and makes a number of recommendations which, the Committee believes, should improve the enforcement of CEPA.

THE PRESENT SITUATION

CEPA is enforced by inspectors who are designated as such under Part VII section 99 of the Act, and whose powers are principally, although not exclusively, set out under sections 100 through 107. Although the designation of "inspector" is the only one expressly authorized under the Act, Environment Canada's inspection staff is actually divided into three groups: inspectors who carry out inspections to verify compliance; inspectors who do inspections and investigate offences; and inspectors who specialize in investigating offences.

¹ Environment Canada, *Canadian Environmental Protection Act, Report for the Period April, 1990 — March, 1991*, Minister of Supply and Services Canada 1992, p. 4.

This functional distinction is maintained in four of Environment Canada's regional divisions, viz., the Atlantic Region, the Ontario Region, the Quebec Region and the Pacific and Yukon Region. The Prairie and Northern Region is the only exception. Because of the limited number of its enforcement staff, and the breadth of the territory it has to cover—three provinces and the Northwest Territories, comprising approximately 50 percent of Canada's land mass—this region has been unable to have its staff specialize into roles of compliance promoters, inspectors and investigators.

At present, Environment Canada employs 28 investigators and 31 inspectors (full-time equivalents), who enforce both CEPA and the pollution-prevention provisions of the *Fisheries Act*. Each region has the following number of enforcement officers:²

| Region | Investigators (full-time equivalent) | Inspectors (full-time equivalent) |
|-----------------------|---|--------------------------------------|
| Atlantic | 2 | 5 |
| Québec | 3 | 7 |
| Ontario | 5 | 9 |
| Prairie & Northern | 14 | 2 |
| Pacific & Yukon | 4 | 8 |
| TOTAL | 28 | 31 |

When an infraction occurs under CEPA or the regulations, few enforcement options are currently available under the Act. A prosecution may be undertaken, but this option is considered to be a measure of last resort and is seldom used. The standard practice is to issue written warnings. In emergency situations involving the unauthorized release of specified substances (discussed later), inspectors may also issue a direction or order to avert, reduce or remedy damage. Lastly, a civil injunction may be sought to stop or prevent a violation from occurring.

The Deputy Minister indicated to the Committee that, since CEPA came into force in 1988, approximately 13,500 industry inspections had been carried out, 1,000 warnings and 29 inspectors' directions were issued, 600 suspected offences were investigated and 66 prosecutions were instituted, 51 of which resulted in a conviction. (70:9)

² The information in this chart was obtained from the national Office of Enforcement. It is based on data compiled by Environment Canada and the Department of Fisheries and Oceans, as updated on April 27, 1995.

When a prosecution is undertaken, the Crown may proceed either by indictment or by summary conviction, depending on the nature of the offence. The maximum punishment for a summary conviction offence is a fine of up to \$200,000 (\$300,000 in specified cases), or imprisonment for up to six months, or both. With indictable offences, the maximum fine is \$1,000,000, or imprisonment for up to three years (five years in specified cases), or both. In addition to any such punishment imposed, the court is empowered to issue a variety of other orders, ranging from a community service order to an order requiring the offender to publicize the details of the infraction (sections 130 to 133). In the most serious cases, (i.e., those causing death or bodily harm), prosecution under the criminal negligence provisions of the *Criminal Code* is also possible (section 115(2)).

In addition to court proceedings by way of summary conviction and indictment, section 134 of CEPA allows for a "ticketing" procedure to be used for offences designated by regulation. This procedure is similar to the "ticketing" regime in place for parking violations: offenders have the option to plead guilty and pay the prescribed fine without having to go to court or they can contest the charge before the courts. As discussed in greater detail below, however, section 134 has not been proclaimed and is therefore, not in force.

THE NEED FOR IMPROVED ENFORCEMENT

A number of witnesses who appeared before the Committee were critical of the Department's enforcement activities under CEPA. The Canadian Institute for Environmental Law and Policy described the situation as follows:

[The] federal Department of the Environment has never fully accepted the regulatory mandate and role with which CEPA provided it. Rather, the department has continued to emphasize its traditional advisory and promotional approaches to its functions, and has been reluctant to enforce those regulations which have been made under CEPA with much vigour. If CEPA is to succeed, Environment Canada has to accept the regulatory role established for it by the statute, and act on this mandate. [. . .] Furthermore, the Act's weak enforcement record has negatively affected the perceived legitimacy of federal action in the field of environmental regulation.³

Similarly the authors of the CEPA Evaluation Report questioned Environment Canada's existing enforcement practices. They observed that while Environment Canada's 1988 *Enforcement and Compliance Policy*⁴ was widely regarded as a model for enforcement policies, in practice there had been a number of serious problems with its implementation. They made the following observations.

³ Canadian Institute for Environmental Law and Policy, *Reforming the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, p. 1 and 5.

⁴ Environment Canada, *Canadian Environmental Protection Act, Enforcement and Compliance Policy*, Minister of Supply and Services, 1988 (republished August 1992).

- There seems to have been a change in emphasis from the Department's official Enforcement and Compliance Policy, which promotes relatively strict compliance, to a policy that emphasizes compliance promotion over strict enforcement — a change in emphasis which, the authors stated, resulted in ambiguity and tension among enforcement staff with respect to the appropriate enforcement strategy to be applied.
- Environment Canada's historical emphasis on conciliation made strict enforcement difficult for many inspectors, some of whom had little enforcement experience. As well, many inspectors were reluctant to enforce because they were technically trained and therefore lacked an "enforcement mentality". Inspectors were also reluctant to enforce because they inevitably developed relationships with the regulated industries, a relationship which they were reluctant to jeopardize by "getting tough".
- The regionalization of enforcement decisions resulted in inconsistent enforcement practices across the country, and efforts to correct this problem by requiring that reports systematically be sent to the Department's national Office of Enforcement as well as to the Regional Directors lead to a situation of "multiple masters", where conflicting messages could be given about the appropriate action to be taken, thereby creating further confusion and undermining morale.
- There was a perception among the enforcement staff from three of the five regional offices that offenders from the public sector were treated more leniently than those within the private sector, notably because cases involving federal departments were reviewed by more senior officials within the Department of Justice.
- Enforcement efforts were undermined by scarce resources and poorly coordinated and inadequate information between the regions and headquarters and within the Department itself.⁵

The Canadian Environmental Network's (CEN) Toxics Caucus identified four reasons for what it termed Environment Canada's "poor enforcement record:"

*First, there is a federal aversion to asserting its constitutional authority to protect the environment. Second, there is a reluctance by Environment Canada to get tough with polluters and act as a regulatory and enforcement body. Third, adequate resources are lacking to fully carry out its enforcement duties. Finally, inspection and enforcement officers have inadequate powers and authority to fulfil their functions.*⁶

The Committee agrees that Environment Canada has not vigorously enforced the Act. While promoting compliance is important, such an approach should not be

⁵ Environment Canada, *Evaluation of the Canadian Environmental Protection Act, Final Report*, 1993, pp. 78 to 84.

⁶ Canadian Environmental Network's Toxics Caucus, *The Canadian Environmental Protection Act: An Agenda for Reform*, November 1994, p. 6.

favoured at the expense of enforcement action. Yet, the Committee has reason to believe this has been the case.

If one reviews the enforcement data from other Canadian jurisdictions, particularly those known for their “hard line” approach, Environment Canada’s enforcement record pales by comparison. One example is the province of Ontario. Since 1987/1988, Ontario has instituted more than two hundred prosecutions *per year*—with a very high conviction rate—for violations of its environmental laws. In 1994, close to 300 prosecutions were initiated. During the peak years of 1991 and 1992, the totals were even higher.⁷

In contrast, enforcement under CEPA for fiscal year 1993-1994 resulted in only three prosecutions: one from the Atlantic Region and two from the Québec Region. No prosecutions were instituted in the other three regions (the Ontario, Prairie and Northern and Pacific and Yukon Regions). A total of 120 warnings, however, were issued out of the 1,548 inspections conducted.⁸

Given the number of warnings issued, clearly, violations under CEPA are being committed. What is less clear, however, is whether the appropriate action is being taken. The data contained in the Department’s annual reports are extremely limited and do not provide sufficient information to determine whether or not the selected course of action was, in fact, appropriate under the circumstances. The data provided on request by the Department are only marginally more informative and are not presented uniformly from one region to the next. As one “user” observed:

[T]he closed and informal nature of Canadian enforcement has meant that consistent records often have not been kept, and where they do exist, they can be difficult to access. An initial request by the author for access to federal compliance data was met with the remarkable response that the information could not be released until it was verified by the regulated industry. Data on individual mills’ discharges, regulatory requirements, and thus compliance status was eventually provided by Environment Canada. However, nationally consistent records of enforcement activity (for example, inspections, warning letters, and prosecutions) simply do not exist.⁹

In his 1991 report, the Auditor General of Canada concluded that Environment Canada could demonstrate neither the efficiency nor the effectiveness of its enforcement and compliance activities.¹⁰ It would seem that few concrete improvements have been made in the intervening years. Yet, the Department must do so in order to determine whether its current enforcement approach is working, whether its priorities are in order and whether additional enforcement resources are needed.

⁷ Government of Ontario, *Offences against the Environment — Convictions in 1994*, p. 8.

⁸ Environment Canada, *Canadian Environmental Protection Act, Report for the Period April 1993 to March 1994*, Minister of Supply and Services Canada, 1994, pp. 39-40.

⁹ Kathryn Harrison, “Is Cooperation the Answer? Canadian Environmental Enforcement in Comparative Context,” *Journal of Policy Analysis and Management*, Vol. 14, No. 2 (Spring 1995), p. 221-244, at p. 229.

¹⁰ Auditor General of Canada, *Report of the Auditor General of Canada to the House of Commons, 1991*, Minister of Supply and Services, p. 271.

The Committee strongly believes that effective and consistent enforcement under CEPA is imperative if the Act is to live up to its objective of protecting human health and the environment. Furthermore, Canada will be under increasing international pressure to enforce its environmental legislation effectively. For example, under the North American Agreement on Environmental Cooperation, commonly known as the environmental “side deal” under NAFTA, if Canada is perceived as a lax enforcer, it could be cited under the agreement for an alleged “persistent pattern of failure to effectively enforce an environmental law relating to a situation involving the production of goods or services traded between the Parties”, and unless the dispute is satisfactorily resolved, an arbitral panel with powers to impose monetary penalties against Canada could be appointed (Articles 22-36).

The Committee strongly believes that effective and consistent enforcement under CEPA is imperative if the Act is to live up to its objective of protecting human health and the environment.

The recent jurisprudence respecting the liability of the Crown for failure to enforce regulatory standards must also be considered. The case law suggests that if the government has a regulatory scheme in place, and that scheme is generally enforced so that the public has a reasonable expectation of a given standard of behaviour, the government may be held at least partially liable for any damage caused by its failure to live up to that standard. While an action of this kind has never been brought against Environment Canada, it is conceivable that one could be in future—thus making it even more imperative that the Department improve its enforcement record.

Admittedly, the Department has already taken steps to resolve some of the problems described above. A centralized enforcement data bank—the Enforcement Activities Tracking System (EATS)—has been developed to keep track of enforcement action across the country and to improve the exchange of information between headquarters and the regional offices. The EATS should be in full operation by the end of 1995. As mentioned earlier, a clear demarcation between the compliance promotion and enforcement functions has also been achieved in all of the regions, except the Prairie and Northern Region. The Department is also continuing its work on the development of Uniform Enforcement Guidelines for regulations, that will complement CEPA's Enforcement and Compliance Policy by outlining more precisely which enforcement measures are most appropriate for which regulations.

These improvements notwithstanding, the Committee believes that effective enforcement will require sustained political will and adequate resources. In previous chapters, the Committee argued that the adoption of pollution-prevention strategies and the use of economic instruments should, in the long term, lead to systematic incentives that would promote compliance without the need for concerted government

intervention. Nonetheless, the Committee believes that Environment Canada must renew its commitment to firm, fair and consistent enforcement.

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Among the recommendations made to the Committee was the suggestion contained in the CEPA Evaluation Report that enforcement decision-making be centralized. Those who support centralization argue, among other things, that it would enhance consistency. It would maintain a clear distinction between enforcement and promotional activities, and create a critical mass of staff able to resist *ad hoc* pressures to relax enforcement in individual cases.¹¹

It should be noted that the Regional Directors expressed a preference for the *status quo*, primarily on the grounds that decentralization was more responsive to regional differences and priorities. In its reply to the CEPA Evaluation Report, Environment Canada also rejected centralization. It stated:

The recommendation proposing a centralized system of enforcement is not acceptable because a regionalized arrangement with functional direction from a national Office of Enforcement was adopted in 1991. The new organization will be monitored and adjustments will be made, as required, to meet the enforcement mandate. Furthermore, Environment is moving to consolidate wildlife and environmental protection enforcement staff in headquarters and the regions.

The Annual Reports indicate marked improvement in enforcement and compliance activities resulting from the recent reorganization and greater resources being made available through Green Plan initiatives.¹²

Based on the evidence before it, the Committee cannot agree that the Department's enforcement and compliance activities have improved *markedly* in recent years. Furthermore, most of the Green Plan funding that was nominally earmarked for enforcement was in fact used for other purposes.

As mentioned earlier, a total of 59 full-time inspectors/investigators enforce CEPA and the pollution prevention provisions of the *Fisheries Act*. By contrast, the province of Ontario has over 400 officers to enforce its environmental laws. Given the small size of the federal enforcement staff and the vast expanse of territory it must cover in its operations, the Committee is not satisfied that Environment Canada has provided that critical mass of staff that is needed to do the job effectively.

¹¹ Environment Canada, *Evaluation of the Canadian Environmental Protection Act, Final Report*, 1993, p. 88-89.

¹² Environment Canada, *Response to the CEPA Evaluation Report*, March 14, 1995, p. 5.

Although the 1995-96 federal budget indicated that Environment Canada's overall budget will be reduced significantly, the Committee understands that no cuts are being made to the enforcement staff. If regulatory activity under CEPA increases in the future, however, it will be necessary either to increase enforcement staff or to find alternative solutions.

Section 98 of CEPA provides for administrative agreements with the provinces with respect to such matters as the enforcement of the Act by provincial enforcement officers. While administrative agreements might be useful, the Committee wishes to stress that special caution should be exercised as regards their use. As discussed in greater detail in the next chapter, the Committee is not satisfied that, under such agreements, accountability and effective enforcement action are ensured.

The Committee also believes that Environment Canada should reconsider its position regarding the centralization of enforcement decisions. If the decision-making function were centralized, national consistency would be ensured. The real issue, however, is not one of "location". It is the *independence* of the decision-making process that counts.

The Committee recognizes that regional concerns are important and should be given every consideration. The centralization of decision-making, however, would not preclude regional input. Enforcement officials would still have to be located in the regions.

In the Committee's opinion, the decision-making process should be restructured to conform to the following four principles.

- ***Independence.*** The enforcement office should be independent from the Department and should report directly to the Deputy Minister or Minister of the Environment to ensure that enforcement decisions are made on environmental grounds and to eliminate the possibility of interference from senior management.
- ***Consistency.*** A clear and detailed policy on compliance and enforcement should be developed and adhered to in practice to ensure that enforcement decisions are consistent across the country. Training programs should be provided where needed. A summary on all enforcement action, including follow-up action in relevant cases, should also be prepared, stored in a centralized databank and systematically disseminated to the regions.
- ***Effectiveness.*** Performance objectives should be set and methods for evaluating effectiveness should be developed to ensure the effectiveness of the compliance and enforcement policy.
- ***Transparency.*** Detailed information on enforcement action should be provided to the public by means of an electronic public registry system (to be installed under CEPA), and a separate publication which will provide a record of enforcement action. This publication should be prepared annually and tabled in Parliament.

The decision-making process would be improved if it were restructured pursuant to these principles. This restructuring, however, is but one of the steps that the Committee advocates. As recommended below, additional enforcement options and enforcement powers must also be provided.

A number of other useful recommendations were made to the Committee. The Canadian Environmental Network's Toxics Caucus stated that Environment Canada should have more authority to undertake prosecutions and that the need to obtain prior permission from the Department of Justice should be eliminated in favour of having such decisions cleared by the lawyers assigned to Environment Canada by the Justice Department. Similarly, the *Société pour vaincre la pollution* recommended that a team of lawyers be established either within Environment Canada or the Department of Justice to specialize in environmental cases.

The Committee sees merit in these proposals. Given CEPA's complexity, there should be a legal team specializing in environmental cases, at least to prosecute the more serious offences. Although some prosecutors within the Department of Justice in Ottawa and in the regional offices have environmental expertise, the Committee recognizes that it may not be possible to utilize such lawyers for all prosecutions under CEPA. Nonetheless, it is imperative, in the Committee's opinion, that lawyers with environmental expertise be assigned to prosecute all CEPA offences that have potentially important jurisprudential and environmental implications.

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The Committee also agrees with the Canadian Environmental Network's Toxics Caucus that prosecutions should not be pre-cleared by the Department of Justice. The need for this added layer of scrutiny is questionable. It will be even more so if the enforcement process is, as recommended, restructured into an autonomous and independent body.

The Committee recommends that:

RECOMMENDATION

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- a) **Environment Canada revise its enforcement approach under CEPA pursuant to the principles of independence, consistency, effectiveness and transparency. Specifically:**
 - **An independent enforcement office with regional branches be established within Environment Canada, that would report directly to the Minister of the Environment or to the Deputy Minister.**

- The CEPA *Enforcement and Compliance Policy* be revised and updated and procedures be established to ensure that enforcement decisions are made with reference to the updated policy. Training programs for enforcement personnel should also be provided where needed and a summary of all enforcement action should be prepared and made available on a centralized databank.
 - Performance objectives be set and methods for evaluating effectiveness be developed to ensure the effectiveness of the Enforcement and Compliance Policy and to determine priorities.
 - Detailed information on enforcement action be provided on the electronic public registry and a separate publication on enforcement action be prepared annually and tabled in Parliament.
- b) The decision to undertake a prosecution be approved by the lawyers assigned to Environment Canada by the Department of Justice. Such decisions need not be approved by other officials within the Justice Department.
- c) All important CEPA offences be assigned to prosecutors with environmental expertise.

ADDITIONAL ENFORCEMENT OPTIONS

Ticketing

As mentioned earlier, prosecution is one of the few enforcement options currently available under CEPA. Although section 134 of CEPA allows for a “ticketing” procedure for designated offences, this provision is not yet in force. It is dependent on the proclamation of the federal *Contraventions Act*, which would set up a general ticketing framework for federal regulatory offences and which would use the existing ticketing systems in the provinces and territories to process tickets issued under the Act. At the time of this Report, the General Counsel of Legal Services for Environment Canada indicated that the related negotiations with the provinces and territories were still going on and a few more months would likely be required before the necessary infrastructure for the Act’s implementation could be put in place.

The ticketing section under CEPA was given royal assent in 1988. The *Contraventions Act* was given royal assent in October 1992. Nonetheless, neither measure is yet in force. The Committee is concerned about the inordinate time delays in bringing these measures into effect. The ticketing provision under CEPA could vastly improve the processing of designated offences under the Act. It is a desirable measure that should be implemented forthwith.

The Committee recommends that the Department of Justice give priority status to the proclamation of the *Contraventions Act* so as to expedite the implementation of the ticketing provisions under section 134 of CEPA.

RECOMMENDATION
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Administrative Monetary Penalties

While a ticketing scheme would provide an additional enforcement tool for designated offences under CEPA, this option would still involve the laying of a charge, albeit in “ticket” form, and a prosecution in court unless the accused chose to pay the prescribed fine in the manner specified. Ticketing, in short, is a procedural mechanism that expedites the handling of offences. It does not alter the fundamental character of the offence. The offence is quasi-criminal in nature and the offender still risks being convicted as charged.

Given the slowness and cost of undertaking a prosecution, and given, too, that formal prosecutions are not always warranted, there has been considerable interest in providing a “non-criminal” enforcement alternative, known as administrative monetary penalties (AMPs) and negotiated settlements within CEPA.

In essence, AMPs are penalties imposed as a consequence of failure to comply with a legal requirement. Under an AMPs scheme, a violator is obligated to pay a prescribed penalty, although the violator is typically afforded the opportunity to dispute that obligation. If the violator opts for a review, the case is heard by a reviewing authority which, depending on the regime implemented, could range from the Minister to a special administrative tribunal established for that purpose. When the case is brought for review, the burden of proof may be on the Crown *or* on the violator, (again, depending on the regime implemented); the standard of proof is usually the civil law standard of “balance of possibilities” which is lower than the criminal law standard of “proof beyond a reasonable doubt”. If the reviewing authority finds that there was a failure to comply, a monetary penalty against the violator is confirmed. Although the violator may, in the end, have to pay the prescribed penalty, there is no “conviction” for having transgressed the law, nor is there any risk of being imprisoned for the transgression; AMPs regimes are limited to monetary penalties. Imprisonment is not an option.

AMPs schemes are commonly used in the United States and currently handle the majority of the environmental infractions. AMPs schemes also represent a growing phenomenon in Canada. At present, AMPs are used under the *Canadian Customs Act*, the *Income Tax Act*, the *Aeronautics Act* and the *Unemployment Insurance Act*. AMPs are also being proposed under Bill C-61 for designated violations of selected laws administered by the Department of Agriculture and Agri-Food, namely the *Canada Agricultural Products Act*, the *Feeds Act*, the *Fertilizers Act*, the *Health of Animals Act*, the *Meat Inspection Act*, the *Pest Control Products Act*, the *Plant Protection Act* and the *Seeds Act*.

A negotiated settlement, also known as a compliance agreement, is an agreement between the regulator and a regulated party, which is intended to increase voluntary compliance and decrease the need to take court action. As with AMPs, a negotiated settlement scheme can be structured in a number of ways.

It is possible to link a negotiated settlement to an AMPs violation. For example, rather than pay the prescribed penalty, the regulated party can be given the opportunity

to negotiate an agreement with the regulator, in which the regulated party commits to take corrective measures, such as changing a manufacturing process, replacing polluting machinery or training staff. Whatever agreement is reached between the parties “suspends” the obligation to pay the penalty, although the penalty will be re-activated, and possibly increased, if the regulated party breaks the agreement.

Bill C-61 also contains provisions regarding negotiated settlements, which are termed “compliance agreements” under the bill. The terms of reference are similar to those given in the above-noted example: instead of paying the prescribed AMPs penalty, violators are given the opportunity to enter into a compliance agreement with the Minister. If they do so, they are deemed to have committed the violation and, if they fail to comply with the terms of the compliance agreement, they are liable to pay twice the amount of the prescribed penalty.

The authors of the CEPA evaluation report and many witnesses who appeared before the Committee favoured the adoption of an AMPs scheme and a framework for negotiated settlements under CEPA — a recommendation which Environment Canada approved in its reply to the CEPA Evaluation Report.

The authors of the CEPA Evaluation Report advanced the following arguments in favour of these measures:

Many of the problems currently being experienced with enforcement under CEPA relate to the fact that CEPA provides for criminal sanctions. The stigma attached to a criminal offence explains in part the reluctance of many officials to enforce the regulations strictly. Similarly, the courts are reluctant to view environmental offences in the same category as traditional criminal offences in many cases. [. . .] Many of these problems could be resolved by the introduction of a system of administrative penalties for the majority of CEPA offences, leaving only the most egregious violations as criminal offences. The U.S. EPA [Environmental Protection Agency] uses a system of administrative sanctions for over 85% of all the offences it prosecutes. This system saves time by relying on less formal and demanding procedures and evidentiary rules. It relies on expert adjudicators who do not require considerable education concerning the environmental consequences of an action. Finally, the system also allows for flexibility in sentencing.¹³

The Committee agrees with this analysis. In the Committee’s opinion, an AMPs system, combined with a negotiated settlement option, similar to that proposed under Bill C-61, should be included under CEPA. Such a scheme would provide a useful intermediate enforcement option that would fill the gap between prosecutions and warnings. Particularly in light of the recent budget cuts, a measure that is less costly to administer than formal prosecutions and provides effective and efficient action without jeopardizing the environment must be supported.

Although many groups recommended the adoption of an AMPs/negotiated settlement scheme under CEPA, none provided details on what the scheme should

¹³ Environment Canada, *Evaluation of the Canadian Environmental Protection Act, Final Report*, December 1993, p. 89-90.

comprise. The two papers prepared by Environment Canada on these topics discuss many possible variations.¹⁴

Since few submissions were received on the constituent elements of an AMPs/negotiated settlement scheme, the Committee is not in a position to make a fully informed decision on this issue. Nonetheless, the Committee is of the opinion that such a scheme should apply only to less serious offences under CEPA. It should also respect the rights of individuals guaranteed under the *Canadian Charter of Rights and Freedoms*. As under Bill C-61, negotiated settlements should be allowed only in the context of a violation; they should constitute an agreed upon *alternative* to the statutory penalty and not a means of *avoiding* enforcement action altogether. Finally, information respecting the penalties imposed or settlements reached under the proposed regime should be made public by including them in the public registry which the Committee recommended be established (see Chapter 14).

Subject to these safeguards, the Committee is satisfied that an AMPs/negotiated settlement regime under CEPA would greatly facilitate enforcement action under the Act and should be adopted.

RECOMMENDATION
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The Committee recommends that CEPA be amended to include a system of administrative monetary penalties and a framework for negotiated settlements that would apply to the less serious offences under the Act.

The Committee further recommends that negotiated settlements be permitted only as an alternative to the payment of the prescribed monetary penalty.

IMPROVED ENFORCEMENT POWERS

As noted earlier, CEPA is enforced by inspectors who are designated as such pursuant to section 99 of the Act, and whose powers are set out principally, although not exclusively, under sections 100 to 107.

The Committee received representations from several witnesses that the existing powers of inspectors should be strengthened in one or more material respects. Environment Canada's Issues Paper #15 also sets out, for the Committee's consideration, a number of possible improvements.¹⁵ These are considered in the five sub-sections following.

Preventive and Remedial Orders

One proposed improvement has to do with the power of inspectors to issue administrative directives. At present, inspectors are empowered under section 36 of

¹⁴ Environment Canada, *Reviewing CEPA, The Issues #13, Negotiated Settlements: An Enforcement Option* and *Reviewing CEPA, The Issues #14, Administrative Monetary Penalties: Their Potential Use in CEPA*, Minister of Supply and Services, 1994.

Part II (toxic substances) and section 57 of Part IV (the “Federal House”) to take, or direct others to take, preventive or remedial action where a substance is released or is likely to be released into the environment in contravention of a regulation or order made under these Parts; where the unauthorized release is causing, has caused or may cause a danger to the environment or human life or health; and where the person who has charge of the substance or who contributed to its release fails to take the necessary action.

Persons authorized or required to take preventive or remedial action under these sections are also entitled to enter or have access to any place or property to do such reasonable things as may be necessary in the circumstances.

The foregoing authority to take preventive or remedial action in emergencies involving an unauthorized release, however, is limited to Parts II and IV; it does not apply to other Parts of CEPA, notably Part V (international air pollution) and Part VI (ocean dumping). Thus, for example, inspectors are currently precluded from taking action under Part VI to prevent the loading of waste in contravention of an ocean dumping permit. They are also precluded from preventing the dumping of that waste without a permit or in contravention of the conditions of that permit. They must wait until the loading or dumping has occurred before they can take action.

A large number of groups recommended that the preventive and remedial powers of inspectors be extended to other Parts under the Act. The Committee agrees with this recommendation, as it would facilitate the prevention or remediation of environmental damage regardless of whether the activity in question involves an unauthorized release of a toxic substance under Part II, a nutrient under Part III, or the unauthorized dumping at sea under Part VI. What is important is that the damage be averted or contained so as not to put the environment at risk.

The power of inspectors, consequently, to direct that preventive or remedial action be taken, or to take such action personally, should be made available under *all* relevant Parts of CEPA, as should the related power of persons to enter or have access to any place or property in order to deal with the situation. In addition, the parties against whom such orders are issued should be required to report on the measures they have taken to comply with the order.

Since the Committee is recommending the addition of new parts under the Act, (notably to deal with products of biotechnology), inspectors’ preventive/remedial powers and the concomitant duty to report should be extended to all relevant new parts created under the Act.

The Committee recommends that the existing power of inspectors to take, or to order, preventive or remedial action in cases of unauthorized releases under

**RECOMMENDATION
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¹⁵ Environment Canada, *Inspectors’ Powers and Provisions Governing Official Analysts in the Canadian Environmental Protection Act (CEPA)*, Minister of Supply and Services, 1994.

sections 36 and 57 be extended to all relevant Parts of CEPA, including any new parts that may be added under the Act.

The Committee further recommends that the related provisions respecting access to property be extended to all relevant Parts of the Act, and that persons against whom a preventive or remedial order is issued be required to report on the measures taken by them to comply with the order.

“Cease and Desist” or “Stop” Orders

A large number of witnesses further recommended that CEPA inspectors be given the power to issue “cease and desist” or “stop” orders to bring to a halt any activity that may be in contravention of the Act or regulations.

At present, this authority is not expressly conferred under the Act, although, as mentioned above, inspectors have the power to issue preventive/remedial orders in emergency situations — a power which includes ordering that an offending activity be discontinued. However, the existing power to issue preventive/remedial orders does not cover all situations that may threaten the environment.

Issue Paper #15 identified a number of examples where inspectors lack the authority to put an immediate stop to a potentially damaging activity.

- Where, during the course of an inspection under the ozone-depleting substances regulations, the inspector discovers that such substances are being imported in contravention of the regulations, he or she is unable to order that the illegal importation activity cease.
- Where the inspector observes the improper storage of PCB material, he or she lacks the authority to order that the material be stored in accordance with the regulations.
- If, during the course of an inspection of a detergent manufacturing plant, the inspector has reasonable grounds to believe that the manufacturer is producing laundry detergents containing more than the allowable limit of phosphates, he or she is unable to order the manufacturer to stop producing the detergent.¹⁶

Of course, inspectors have other means at their disposal to bring offending activities to a halt, such as seeking an injunction, seizing the illicit material or laying charges against the offender. However, these do not provide an immediate remedy to the same extent as would a “cease and desist” or “stop” order.

The Committee notes that the authority to issue “cease and desist” or “stop” orders is provided under a number of provincial environmental laws. The power to issue such

¹⁶ *Ibid.*, p. 18.

orders, however, is not usually vested in inspectors. Rather, it is vested in the Minister or a designated senior official. Also, the power is usually exercised only if the environment or human health are put at risk by reason of unlawful activity. Both features are absent in the examples given in Issues Paper #15.

The Committee endorses the use of “cease and desist” or “stop” orders in appropriate cases and agrees that CEPA should be amended to this end. However, the Committee is not prepared to recommend the use of such orders where there is no threat to human health or the environment. As stated above, inspectors have other means at their disposal to deal with violations under the Act. In the Committee’s opinion, the use of a “cease and desist” or “stop” order should be permitted only in compelling circumstances.

The Committee recommends that CEPA be amended to allow the use of “cease and desist” or “stop” orders to prevent or contain any danger or threatened danger to human health or to the environment that has resulted from, or may result from, a violation of the Act or regulations. The Committee further recommends that Environment Canada, in consultation with the Department of Justice, determine the terms and conditions under which such orders should be used.

RECOMMENDATION
129

An Expanded Power of Entry for Inspection Purposes and the Use of Tele-Warrants

At present, inspectors have the right under section 100 to enter “any place” for inspection purposes. If, however, the place to which entry is being sought consists of a private dwelling, and the occupant of the dwelling refuses or is likely to refuse entry, a warrant to enter the premises must first be obtained in person from a justice of the peace, who may, in granting the warrant, stipulate that reasonable force may be used to execute the warrant, provided a peace officer is present. This is the only circumstance where an inspector can “force entry” for inspection purposes.

If entry is denied to places other than a private dwelling, a warrant is unavailable. By the same token, if entry cannot be gained because no one is present to allow or deny access, a warrant is unavailable. It is also unclear whether the power to inspect “places” under section 100 extends to platforms anchored at sea and to motor vehicles and other conveyances.

Issues Paper #15 suggested several improvements to the existing powers of entry for inspection purposes—namely that: authority to seek a warrant for inspection purposes be provided in all cases where, for whatever reason, entry cannot be gained; the justice of the peace to whom the application is made be given the authority to allow the limited use of force in executing the warrant; and it be made explicit under the Act that the term

“places” includes platforms anchored at sea, motor vehicles and other conveyances.¹⁷

Similar recommendations were made by witnesses. For example, the CEN Toxics Caucus recommended that authority be provided under CEPA to gain entry where an owner refuses consent. The Environmental Law Section of the Canadian Bar Association (CBA) recommended that CEPA be amended to permit an inspector to seek a court order authorising forcible entry on private property when necessary for the administration of the Act. The CBA stressed, however, that such an order should be made strictly for the purposes of verifying compliance and not for the purposes of searching and seizing evidence of the commission of an offence.

The Committee agrees with these suggested improvements. If, for whatever reason, inspectors are unable to gain entry for inspection purposes, it should be possible for them to seek the requisite authorization from a justice of the peace, subject to such terms and conditions as may be prescribed.

Provision should also be made allowing the justice of the peace to specify that reasonable force may be used to execute the warrant. As the CBA stated, “the process of obtaining the order from an impartial judicial official provides a citizen with some protection against regulatory abuses, while allowing inspectors to use force to do their jobs where this is necessary”.¹⁸

Given that an impartial judicial official will decide whether or not a warrant to enter and inspect premises should be issued, the Committee agrees that a proper balance will be struck between the rights of citizens and the need for effective enforcement action.

As pointed out in Issues Paper #15, it can be difficult for inspectors to obtain a warrant when they are carrying out an inspection in a remote area. Indeed, they may have to travel a considerable distance in order to obtain the necessary authorization. If inspectors were allowed to apply for a warrant by means of telecommunications (e.g., telephone, facsimile transmission (fax) or computer modem), they would be able to enforce the Act more expeditiously, and time and money would be saved. It would therefore be desirable, in the Committee’s opinion, if inspectors were allowed to use “tele-warrants” in such cases, and in any other case where a warrant had to be obtained, for example, for search and seizure purposes.

The Committee recommends that:

RECOMMENDATION

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- a) **CEPA be amended to permit inspectors to seek a warrant from a justice of the peace, authorising entry into all premises and places for the purposes of carrying out an inspection.**

¹⁷ *Ibid.*, p. 14.

¹⁸ The Environmental Law Section of The Canadian Bar Association, A Submission on the Canadian Environmental Protection Act, Brief to the Committee, December 1994, p. 39.

- b) Provision be made allowing a justice of the peace to authorize the limited use of force in executing the warrant and to prescribe such other terms and conditions as are deemed appropriate.**
- c) CEPA be amended to allow warrants to be obtained by means of telecommunication (telephone, facsimile transmission, computer modem, etc.)**
- d) CEPA be amended expressly to provide that the term “places” includes platforms anchored at sea, motor vehicles and other conveyances.**

Designating CEPA Officers

Another suggestion the Committee was asked to consider in Issue Paper #15 was the creation of an additional category of enforcement officer under CEPA, with the designation “CEPA Officer”. A CEPA Officer would have with the existing powers of an inspector under the Act, but would, in addition, have the powers of a “peace officer”. Specifically the power to deliver notices for court appearances, summonses, notices of appeal and similar documents to the named recipient or recipients; the power to secure search warrants by telephone or other means of telecommunication (tele-warrants); and the power to gain access to police information systems that are restricted to peace officers.

If this new category of CEPA Officer were created, the distinction between compliance verification and the inspection of offences would be more clearly drawn. The additional powers conferred on CEPA Officers would, in turn, enhance efficiency and facilitate enforcement.

It seems evident that if CEPA officers were authorized to deliver and serve official documents, the public interest would be better served. At present, this task is executed by provincial court bailiffs and sheriffs who serve documents related to a variety of other legal proceedings. Environment Canada must wait its turn and abide by the priorities set by the bailiff’s or sheriff’s office. It is not, in this respect, in control of its own process; it must rely on other agencies to get the work done.

Similarly, for the reasons outlined earlier, the right to obtain a tele-warrant would vastly facilitate enforcement actions.

Gaining access to police databanks could also be helpful. Criminal elements may be involved in environmental offences, such as the illicit import and export of toxic substances and hazardous wastes. Having access to databases such as the Canadian Police Information Centre (CPIC) and the Police Information Retrieval System (PIRS) could therefore assist in carrying out investigations.

Another compelling reason for conferring the powers of a peace officer on CEPA inspectors is that it could lead to greater harmonization of enforcement action within Canada. Some jurisdictions have designated their environmental enforcement officers

as peace officers. If CEPA inspectors were vested with such powers, it might be even more feasible to cross-designate federal and provincial or territorial enforcement personnel and thereby increase the efficiency of enforcement operations nationally.

The Committee notes that selected enforcement officers under the *Fisheries Act* and other laws administered by the Department of Fisheries and Oceans have already been designated as peace officers. For the reasons outlined above, the Committee believes that CEPA inspectors should be given the same designation.

RECOMMENDATION
131

The Committee recommends that CEPA be amended to authorize providing CEPA inspectors with the powers of a peace officer.

Official Analysts

Section 99 of the Act authorizes the Minister of the Environment to designate as an “official analyst” any person so qualified. Pursuant to section 126, analysts so designated may give their evidence in court by means of a certificate, provided proper notice is given and the court does not order that the analyst appear personally. Apart from this limited authority, however, official analysts have no special powers under the Act.

Issue Paper #15 cites a number of cases where the lack of additional powers for an official analyst has been a problem. One example refers to a regulated party required by regulation to conduct compliance tests under the supervision of an inspector. The supervising inspector, however, does not always have the specialized knowledge of an official analyst and therefore may be unable to ensure that the testing is conducted properly. Official analysts, conversely, are often unable to provide their technical expertise because they lack the authority under the Act to accompany inspectors, enter premises, etc.

While Environment Canada has overcome this problem by training a few laboratory analysts as inspectors, then designating them inspectors for the purposes of the Act, it is felt that this solution is neither efficient nor cost-effective. At issue, therefore, is whether official analysts should be granted additional powers under the Act to assist in monitoring and verifying compliance.

The Committee believes it would be beneficial if official analysts were given additional powers. Since the reason for having official analysts participate in an inspection is not to replace inspectors, but to assist the latter in exercising their duties by contributing added expertise, the Committee feels that the powers granted to official analysts should be limited to those that are actually required for them to do their jobs. Consequently, the Committee contends that official analysts should *not* have the full range of powers currently vested in inspectors, such as the powers of search and seizure under section 101. These powers, in the Committee’s view, are best left in the hands of the inspectors.

Official analysts should be able to execute their specialized duties with the power to enter premises pursuant to section 100(1), and the power to open and examine receptacles and packages, take samples and measurements and conduct tests pursuant to section 100(5). In the light of these new powers, several related amendments should also be made to other provisions under the Act. Notably, section 99 (certificate of designation), section 102 (assisting inspectors), section 103 (obstructing inspectors) and section 111 (offences contrary to sections 102 and 103) should be amended to include a reference to official analysts. Therefore:

The Committee recommends that official analysts be granted the power to enter premises under section 100(1), and the power to open and examine receptacles and packages, take samples and measurements and conduct tests under section 100(5), and that the necessary consequential amendments be made.

**RECOMMENDATION
132**

MISCELLANEOUS ISSUES

Sentencing

As mentioned earlier, in passing sentence the court may impose a variety of orders under section 130 of the Act in addition to any penalty.

A number of representations were made to the Committee that section 130 should be amended to enable the court to allow for the recovery of expenses incurred by the Department in the investigation and prosecution of offences. A similar recommendation was made by the Environmental Law Section of the Canadian Bar Association that the fines collected from offences under the Act should be applied to an Environment Canada fund for expanded surveillance, research activities and other administrative duties. Lastly, the authors of the CEPA evaluation report recommended that Environment Canada provide improved guidance to the courts by sensitizing the judiciary to the gravity of environmental offences; improving the level of understanding by federal prosecutors on what issues are important for sentencing in environmental cases; providing for an explicit classification of offences; and including sentencing guidelines for the court's consideration, as is done under the *Canada Shipping Act*.

The latter recommendations were accepted by Environment Canada in its reply to the CEPA evaluation report. The Committee agrees with this decision. It also agrees that the other recommendations made by the witnesses be adopted.

The power of the court to order the recovery of the costs of investigation and prosecution in appropriate cases is consistent with the polluter-pays principle which has informed other recommendations made by the Committee. The requirement that fines be placed in a special environmental fund also ties in with our earlier recommendation in Chapter 14 respecting the establishment of an environmental fund to finance various departmental activities, including participant funding.

The Committee recommends that:**RECOMMENDATION****133**

- a) **Section 130 of CEPA be amended to enable the court to order the recovery of the costs incurred in the investigation and prosecution of offences under the Act.**
- b) **CEPA be amended to require that the fines and administrative monetary penalties collected in relation to violations of the Act or regulations be placed, in whole or in part, in an environmental fund created under CEPA, and that these monies be used for expanded surveillance, research activities and other administrative duties, including the financing of participant funding.**
- c) **CEPA be amended to provide for an explicit classification of offences and sentencing guidelines for the court's consideration.**
- d) **Environment Canada continue to sensitize the judiciary to the gravity of environmental offences and to improve the level of understanding by federal prosecutors as to what issues are important for sentencing in environmental cases.**

Publicizing Enforcement Action

In passing sentence, the court is empowered under section 130(1)(c) of CEPA to make an order requiring an offender “to publish, in the manner prescribed, the facts relating to the conviction”. This measure, however, is discretionary. Moreover, it would not apply to convictions arising under the (new) ticketing regime where the accused pays the fine and therefore does not appear before the court and is not “sentenced”. Nor would it apply to cases involving administrative monetary penalties. As mentioned earlier in this chapter, no “offence” is committed under the AMPs regime nor is a “violateur” at risk of being “convicted and sentenced”.

The authors of the CEPA Evaluation Report recommended that Environment Canada actively publicize its enforcement actions. The Committee agrees that violations under the Act should be publicized. Public opinion plays an important role in influencing behaviour, particularly corporate behaviour. Publicizing offences could therefore have a potent deterrent effect on past and potential offenders.

Earlier in this chapter, the Committee recommended that detailed information on the enforcement action under the CEPA be published in the electronic public registry and in a separate annual publication to be tabled in Parliament. While information on enforcement will be made public by these means, the Committee believes that additional “publicity” should be sought where possible. For example, some newspapers have a special column on offences of interest committed in their community. Where, as in this example, an opportunity for publicity exists, it should be pursued. Thus, the Department could issue press releases on violations so that they could be publicized by the media.

In addition, the Committee believes it would be beneficial if, for serious offences, the court were *required*, rather than *allowed*, to order offenders to publish an account of their convictions. For the sake of deterrence, publicity should be actively sought wherever possible and, in some cases, it should be mandated.

The Committee recommends that CEPA be amended to require the court to order that persons convicted of a serious offence publish an account of their conviction under such terms and conditions as the court may prescribe. The Committee further recommends that Environment Canada issue press releases on violations under the Act or regulations so that they may be publicized by the media.

RECOMMENDATION
134

THE ADMINISTRATION OF CEPA

MANAGEMENT AND RESOURCES

Environment Canada and Health Canada share responsibility under CEPA for the assessment of substances and the development of regulations and guidelines. Overall administration of the Act, however, is the responsibility of Environment Canada. CEPA is not operated as a discrete program within Environment Canada; its activities are encompassed within the overall structure of the Department.

CEPA is an important component of the federal environmental protection program. CEPA's effectiveness, however, has been weakened both because of the many structural problems with the Act that we have commented on in this Report, and by the absence of clear objectives.¹ The CEPA Evaluation Report commented on the lack of clarity with respect to the government's objectives and priorities for CEPA. According to the authors of the Report, "this lack of clarity with respect to overall priorities manifests itself in the fact that no clear expression was ever made of the criteria to be applied in implementing CEPA's array of mechanisms and instruments . . ."² In turn, the lack of criteria for determining priorities has hindered administration of the Act.

The authors of the Evaluation Report concluded that Environment Canada must "develop explicit criteria and . . . adopt a more deliberate process for choosing among CEPA's various instruments . . ."³ As well, there is a need for "a clearer definition of priorities for environmental protection in C&P (now Environmental Protection Service) and, more broadly, among the many other environmental problems faced by Environment Canada".⁴

The Evaluation Report noted that as a result of the absence of clear objectives for the Act, evaluating CEPA was largely an activity-based exercise, focusing primarily on the number of activities completed rather than on the achievement of objectives and results. The report therefore suggested that more attention be paid to the establishment of objectives, priorities and the definition of results. This reorientation

¹ Environment Canada, *Evaluation of the Canadian Environmental Protection Act (CEPA)*, Final Report, December 1993, p. 151.

² *Ibid.*, p. 119.

³ *Ibid.*

⁴ *Ibid.*

would allow for more objective-driven performance measurement and evaluation.⁵

To achieve these results, the Evaluation Report made the following recommendations:⁶

The specific results to be achieved over the next five years through CEPA and related instruments should be articulated. Performance against these results should be reviewed annually.

A plan describing the actions required to achieve the results, once defined, should be developed.

A long-term human resource strategy (covering recruitment and training) should be developed and linked to defined priorities and results.

Environment Canada has responded positively to these recommendations and has advised the Committee that work is underway to implement them.⁷ The Committee endorses these recommendations with respect to the management and implementation of CEPA. An important challenge will be to define the environmental and human health results to be achieved under CEPA and to implement a results-driven performance measurement system.

The CEPA Evaluation Report also examined the allocation and adequacy of resources for the administration of CEPA. Environment Canada and Health Canada now spend about \$72 million annually to administer CEPA. These costs have risen from approximately \$21 million in the first fiscal year of CEPA's operation. The Committee notes that approximately one-half of Environment Canada's resources allocated to CEPA come from Green Plan funds, which are due to end in 1996-97. In addition, we note that Environment Canada will lose personnel and financial resources as a result of recently announced federal restraint measures.

Future funding for CEPA will be affected by many factors. These include: the kinds of initiatives that the government undertakes under the Act; the number of equivalency and administrative agreements negotiated and whether Environment Canada funds provincial activities under these agreements; the extent to which federal and provincial environmental protection activities are rationalized; and whether Environment Canada continues with the present regulatory approach or adopts other methods of environmental management.⁸

The Evaluation Report concluded that it is "impossible to evaluate the adequacy of resources to support the implementation of CEPA in the absence of a clear set of

⁵ *Ibid.*, p. 123.

⁶ *Ibid.*, p. 152.

⁷ Environment Canada, *Response to the CEPA Evaluation Report*, March 14, 1995, p. 16.

⁸ *CEPA Evaluation Report*, p. 126.

objectives. Resource allocation decisions should be coupled with a clearer definition of priorities.”⁹ The Report went on to make the following recommendations.

The allocation of resources to activities conducted through CEPA should be reviewed annually in conjunction with a review of performance against results.

*Funding needs should be re-examined in light of clarification of CEPA's objectives. . . .*¹⁰

The Committee notes that Environment Canada has agreed with these recommendations and we endorse them in the hope that results-based analysis will guide the allocation of funds to various CEPA activities.

FEDERAL-PROVINCIAL HARMONIZATION UNDER CEPA

Because the federal and provincial governments share responsibility for environmental protection, it is critical that both levels of government work to coordinate and harmonize their activities. Under CEPA there are three principal mechanisms for harmonizing federal and provincial environmental activities: the Federal-Provincial Advisory Committee, equivalency agreements, and administrative agreements.

Federal-Provincial Advisory Committee

Pursuant to section 6 of CEPA, the Minister of the Environment can establish a Federal-Provincial Advisory Committee (FPAC) to advise on certain regulations of toxic substances under section 34 of CEPA and on other CEPA-related environmental matters that are of mutual interest to the federal and provincial governments. The purpose of FPAC is clearly stated in the Act: to create a framework for national action, to take cooperative action in matters affecting the environment and to avoid conflict between, and duplication in, federal and provincial regulatory activity.

Comprised of representatives from Health Canada, Environment Canada and each of the provinces and territories, FPAC, (through its working groups), has been involved in several issues, including ozone-depleting substances and air quality. FPAC has been consulted on the process for selecting substances to be included on the PSL2, it has provided comments on draft regulations and Environmental Choice Guidelines and has worked to resolve a number of outstanding issues in connection with equivalency agreements under CEPA.

⁹ *Ibid.*, p. 127.

¹⁰ *Ibid.*

The CEPA Evaluation Report noted that at the time the report was prepared, there was general satisfaction with FPAC, although some provinces questioned the need for it.¹¹ The Committee also heard some concern that the Canadian Council of Ministers of the Environment (CCME) might supplant FPAC in its federal-provincial coordinating role under the Act.

In its brief to the Committee, CIELAP had the following to say about the role of FPAC:

Whatever role FPAC plays, it appears to be diminishing in importance to the provinces and territories, as suggested by the fact that the committee has never achieved its original plan to meet four times a year. The Committee now meets twice a year, but, at the spring, 1993 meeting, only seven of twelve provincial and territorial representatives attended. The reason offered for the reduced number of meetings, and the reduced number of attendees at the meeting is the expense. A better explanation might be that the work statutorily created for FPAC is understood by the provinces and the territories as being done by another body, the CCME.¹²

The Committee believes that FPAC has been a useful forum for federal-provincial consultation respecting CEPA-related issues. While acknowledging that the potential exists for FPAC to be overtaken by the CCME, the Committee believes that any move in that direction would be detrimental to CEPA. Constituting only one facet of federal-provincial environmental relations, CEPA-related issues may be dwarfed by other matters on the federal-provincial environmental agenda. The Committee therefore strongly supports the continuance of a consultative mechanism within CEPA.

The Committee recommends that the Federal-Provincial Advisory Committee as established under section 6 of CEPA continue as the principal federal-provincial-territorial consultative mechanism for CEPA-related issues.

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As noted earlier, FPAC is comprised of representatives from the federal, provincial and territorial governments. The Grand Council of the Crees (of Quebec) urged the Committee to include aboriginal representatives on all federal-provincial advisory committees that may be established under CEPA in future. They called for mechanisms under CEPA that would add a strong aboriginal voice to those of the provinces when policies, rules and regulations are developed under the Act.¹³

As the principal forum for consultation under CEPA, FPAC could benefit from the participation of Aboriginal peoples. The Committee therefore supports a broadening of the base of participants within FPAC to include representatives from Aboriginal peoples.

¹¹ *Ibid.*, p. 100.

¹² Canadian Institute for Environmental Law & Policy, *Reforming the Canadian Environmental Protection Act*, Brief to the Committee, September 1994, Appendix 1, p. 15.

¹³ Grand Council of the Crees (of Quebec) and the Cree Regional Authority, *Brief to the Committee*, November 1994, p. 9.

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The Committee recommends that the Minister of the Environment review the role and mandate of the Federal-Provincial Advisory Committee and seek the participation of Aboriginal peoples on the Committee.

Equivalency Agreements

Equivalency agreements can best be described as “work-limiting” agreements; they terminate the application of a CEPA regulation in a province by recognizing an equivalent provincial provision. CEPA regulations, however, continue to apply to federal works, undertakings and lands.

In its original form, CEPA called for consultations with the provinces prior to adopting regulations and there was no reference to equivalency agreements. Introduced by the then Minister of the Environment when the legislation was being considered by a Parliamentary Committee, the concept of equivalency agreements was designed to assuage provincial concerns about a federal presence in a jurisdiction the provinces had traditionally considered to be theirs.

The statutory foundation for equivalency agreements is found in subsections 34(5) and (6) of CEPA.¹⁴ Subsection 34(5) provides that, except with respect to the federal government, a regulation respecting CEPA-toxic substances will not apply in a province for which the Governor in Council has made an order declaring that the regulation does not apply. Before such an order can be made, however, the Minister of Environment and the government of a province must agree that the province has provisions equivalent to the relevant CEPA regulation in force; and the province has provisions similar to sections 108 to 110 of CEPA for the investigation of alleged offences under provincial environmental legislation. (Sections 108 to 110 provide that two persons may request the Minister of the Environment to undertake an investigation.)

Other than the requirement for a province to have an equivalent provision in place and laws which allow citizens to request an investigation of an alleged offence, CEPA does not set out criteria for establishing equivalency. However, the following additional criteria, were made public in early 1988.

- The provincial environmental quality standard or release limits must be at least equal to the federal standard.
- Measurement or test procedures comparable to those developed under CEPA must be in place.
- Standards must be enforced in a manner comparable to CEPA.

¹⁴ Part V of CEPA (international air pollution) also provides for equivalency agreements in relation to air pollution regulations.

- Comparable penalties must exist under provincial legislation.¹⁵

These criteria were subsequently refined by the Working Group on CEPA Partnerships into the following three policy statements:

- There must be comparable measurement and test procedures for determining compliance.
- There must be a public, written enforcement policy in the province that is equivalent to the CEPA Enforcement and Compliance Policy; and
- There must be penalties relating to equivalent provisions that are comparable to those specified in CEPA.¹⁶

To be considered equivalent under section 34(6) of CEPA, provincial standards do not have to be identical to those of the relevant CEPA regulation. Rather, the provincial provisions must have an equal or equivalent *effect*. Thus, even if the provincial requirements are found in the conditions of a licence or approval, they may still be of equivalent effect.¹⁷

CEPA's equivalency agreement provisions were intended to create a framework within which federal and provincial laws co-exist and are harmonized and overlap and duplication would be reduced. However, after nearly seven years, only one such agreement has been finalized. On June 1, 1994 the federal government and the province of Alberta entered into an agreement with respect to the *Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations*; the *Pulp and Paper Mill Defoamer and Wood Chip Regulations*; the *Secondary Lead Smelter Release Regulations*; and the *Vinyl Chloride Release Regulations*.

There are several reasons why equivalency agreements have not proliferated. The CEPA Evaluation Report cites a number of problems associated with equivalency, such as: the inability of some provinces to satisfy the statutory condition that they have in place equivalent provisions to those in sections 108 to 110 of CEPA, the slow pace of promulgating regulations under CEPA; the costs of formulating and implementing equivalency agreements; and, difficulties in establishing the meaning of "equivalency".¹⁸

Although equivalency agreements were introduced into CEPA to allay provincial concerns, the authors of the Evaluation Report note that they have been "an irritant in federal-provincial relations". Some provinces have been reluctant to change their laws

¹⁵ House of Commons, *Minutes of Proceedings and Evidence of the Legislative Committee on Bill C-74*, February 3, 1988, Issue No. 14:7.

¹⁶ *Canada Gazette*, Part I, 23 July 1994, pp. 3465-3466.

¹⁷ *Ibid.*, p. 3466.

¹⁸ *CEPA Evaluation Report*, pp. 102-103.

to accommodate the equivalency criteria and have voiced concerns about an absence of flexibility in defining equivalency.¹⁹ Indeed, the authors of the Report note that at least four provinces indicated to them that they did not intend to negotiate equivalency agreements.

The CEPA Evaluation Report concluded that the federal government's lack of progress in concluding equivalency agreements suggests that the criteria for establishing equivalency may be a barrier.²⁰ This is particularly evident with respect to the criterion that gives individuals the right to call for an investigation of a complaint. The Committee notes, however, that in the two years since the Report was issued, a number of provinces have changed or announced that they are considering changes to their laws to provide for such rights and, as a result, the inability of some provinces to meet the statutory criteria for equivalency should be of less concern. Moreover, the softening of the federal stance to accept provisions of "equivalent effect" rather than requiring identical provincial provisions should facilitate the negotiation of more equivalency agreements.

Administrative Agreements

Section 98 of CEPA provides for federal-provincial agreements with respect to the administration of CEPA. The principal elements of administrative agreements were aptly described in the CEPA Evaluation Report in the following manner:

*Administrative agreements represent work-sharing partnerships for the cooperative and reciprocal management of toxic substances under the authority of both federal and provincial legislation. The agreements aim to eliminate overlap and duplication and to provide a one-window approach to industry.*²¹

Thus far, administrative agreements have been signed with Quebec, Saskatchewan, British Columbia and Yukon.

Administrative agreements usually cover activities such as inspection, enforcement, monitoring and reporting. They contain information-sharing and other provisions that allow the federal government to monitor provincial enforcement activities and certify compliance. For example, the administrative agreement with Saskatchewan allows industry to report spills to a single telephone number, sets out mechanisms for determining which agency will respond to spills and lead investigations, provides for the designation of provincial staff as CEPA inspectors, and allows for joint planning of verification activity on an annual basis. However, the federal government retains the

¹⁹ *Ibid.*, p. 103.

²⁰ *Ibid.*, p. 106.

²¹ *Ibid.*, p. 104.

right to intervene if it determines that provincial enforcement actions do not meet federal policies on enforcement and compliance.²²

Administrative agreements do not need to meet the statutory criteria pertaining to equivalency agreements. CEPA, however, does require that they be made public and that the Minister of the Environment report annually on the administration of the Act under the agreements.

Improving Administrative and Equivalency Agreements

A number of witnesses favoured the use of administrative and equivalency agreements under CEPA, viewing them as a way to minimize overlap and duplication between the federal and provincial governments and to reduce their compliance costs. Indeed, the Mining Association of Canada felt that they should be authorized under other federal environmental statutes. The Environmental Law Section of the Canadian Bar Association (CBA) advocated the wider use of equivalency agreements because they eliminate overlapping regulations and standards.²³ The CBA also called for greater use of administrative agreements, particularly where they go beyond centralizing the flow of information and actually eliminate overlapping standards.²⁴ Another witness noted that equivalency and administrative agreements have a potentially useful role in ensuring some form of minimum national level of environmental protection and in providing for a rational use of administrative resources between the two levels of government. (39:26)

Although there is general acceptance of the concept of equivalency and administrative agreements, some witnesses expressed reservations about the process used to achieve them. The CBA and CIELAP, among others, commented on the lack of public information and public involvement.

Concerns were also expressed about accountability. How can the federal government ensure that CEPA regulations are being enforced effectively or that the provinces are adequately enforcing their own regulations? The Canadian Public Health Association called for a defined public accountability framework to ensure that national standards are met. Others advocated stringent requirements for determining, overseeing and evaluating intergovernmental agreements under CEPA.

In a 1993 article, Franklin Gertler made a number of suggestions to reform the process relating to intergovernmental agreements, many of which are germane to administrative and equivalency agreements.

... there must be guarantees that the intention to negotiate an intergovernmental agreement is made public as early as possible in the

²² Environment Canada, Prairie and Northern Region, Presentation to the House of Commons Standing Committee on Environment and Sustainable Development, November 30, 1994, p. 14.

²³ The Environmental Law Section, The Canadian Bar Association, Brief to the Committee, December 1994, p. 6.

²⁴ *Ibid.*

process and that meaningful opportunities exist for public participation and comment . . . there should be pre-publication, public consultation, and publication of draft agreements in Part I of the Canada Gazette with an appropriate comment period, . . .

. . . once an agreement has been concluded it should be published in the Canada Gazette, Part II and indexed. . . .

. . . all agreements should require detailed annual reporting to Parliament on the administration and enforcement of federal law or equivalent provincial law.

. . . all agreements should have sunset clauses requiring periodic review.

. . . an adequate mechanism is needed whereby citizens who believe that enforcement by provincial officials is inadequate can petition for federal enforcement or take private prosecutions.²⁵

The thrust of Mr. Gertler's proposals was echoed to the Committee in submissions from the CBA, CIELAP and the Centre Québécois de Droit de l'Environnement.

The Committee endorses the concept of administrative and equivalency agreements under CEPA. By reducing duplication and overlap between the federal and provincial governments, they can help reduce the cost of administering regulations, decrease disputes between governments, introduce more certainty into the decision-making process and better define the roles of government in environmental protection. Having said this, however, the Committee wishes to ensure that, in the words of the CBA, these agreements "do not escape legislative control or subvert such values as justice, accountability or responsibility".

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At present, there is very little opportunity for public input into the agreement-making process; there is no statutory requirement that administrative agreements be published in draft form for public comment, and while section 48 of CEPA requires publication in the *Canada Gazette* of a proposed equivalency order, public comment during the agreement-negotiation phase is not obligatory.

Furthermore, information about these agreements is lacking. Although both administrative and equivalency agreements must be made public, there is no

²⁵ Franklin S. Gertler, "Lost in (Intergovernmental) Space: Cooperative Federalism in Environmental Protection," in Steven A. Kennett, ed. *Law and Process in Environmental Management: Essays from the Sixth CIRL Conference on Natural Resources Law*, Calgary: Canadian Institute of Resources Law, 1993, pp. 281-282.

requirement that they be published in the *Canada Gazette* Part II or that they be made available on a central public registry.

The reporting requirements with respect to these agreements also merit improvement. Although the Minister must report annually to Parliament on the agreements, CEPA does not spell out the kind of information to be included in the report. The Committee would like to see this set out in the Act. In the Committee's view, the report should contain information that would allow both the public and Parliamentarians to analyze and assess the operation of the agreements. At a minimum, the report should contain information on provincial inspection, investigation, verification and enforcement activities, data on spills and releases, and information on disputes that have arisen under the agreements.

The Committee supports the proposal that equivalency and administrative agreements contain sunset clauses. Subject to general termination provisions, agreements of this nature should be in force for a fixed period of time. In the opinion of the Committee, the introduction of sunset clauses providing for a periodic review of the operation of such agreements would aid both enforcement and administration.

Furthermore, as a matter of principle, the Committee urges the federal government to retain the right to prosecute under CEPA when it enters into administrative agreements. This right, and the conditions under which it will operate, must be spelled out in all such agreements. By doing so, the federal government will have assured the Canadian public that it can step in when a province or territory cannot or will not enforce federal regulations.

Finally, the Committee believes that Parliament has a role to play in these agreements. Cases involving the transfer of federal enforcement responsibilities to the provinces or territories or the suspension of the application of federal regulations merit the attention of Parliament. The Committee is not suggesting that Parliament be involved in the nuts and bolts of the negotiation process, but rather that, once finalized, administrative and equivalency agreements be tabled in the House of Commons and subject to a resolution of the House of Commons.

The Committee recommends that CEPA be amended to provide for:

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- a) **publication of proposed equivalency and administrative agreements in the *Canada Gazette* Part I and in a public registry;**
- b) **public consultation with respect to proposed equivalency and administrative agreements;**
- c) **publication of the final text of administrative and equivalency agreements in the *Canada Gazette* Part II and in a public registry;**
- d) **detailed annual reporting to Parliament on the administration and enforcement of CEPA regulations and equivalent provincial regulations; and**

- e) the insertion of sunset clauses into equivalency and administrative agreements requiring a review of the agreements before the expiration of five years.

The Committee recommends that CEPA be amended to provide that equivalency and administrative agreements be tabled in the House of Commons and reviewed by the House of Commons Standing Committee on Environment and Sustainable Development or its successor and that such agreements not take effect until endorsed by a resolution of the House of Commons.

The Committee recommends that the federal government retain full authority and accountability under administrative agreements to enforce CEPA.

In addition to the process-related changes described above, the Committee believes that the substantive criteria stipulated as prerequisites for equivalency agreements should be reviewed. The Committee agrees with witnesses who argued that to insist that provincial provisions mirror federal regulations in virtually every detail will effectively preclude further agreements. But the Committee is also anxious that the criteria not permit a relaxation of standards; in order to be considered equivalent, provincial and territorial laws must be at least as stringent and as effective as CEPA.

An attempt to avoid reliance on overly formal criteria led Environment Canada to adopt its current criterion of “equivalent effect”. While sympathetic to the rationale underlying this policy, the Committee is concerned about the current absence of safeguards to protect against an erosion of standards. As noted above, some of these safeguards entail increased public involvement in and scrutiny of the equivalency and administrative agreement process. In addition, however, there may be a need to alter the substantive criteria for determining equivalent effect or to introduce additional criteria to ensure the maintenance of the highest possible standards.

The Committee is also concerned about the criteria employed by Environment Canada in relation to administrative agreements with the provinces. Unlike equivalency agreements, administrative agreements are not subject to criteria defined by statute. While the Committee does not believe that CEPA should contain criteria for administrative agreements, it is of the view that criteria for such agreements should be developed and reviewed in consultation with the public.

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The Committee recommends that within 12 months of the tabling of this Report, Environment Canada undertake and complete a public review of the criteria which must be met before equivalency and administrative agreements are signed. The main objective of this review should be to ensure the maintenance of the highest possible standards.

In making these recommendations, the Committee does not wish to create additional obstacles to the conclusion of equivalency and administrative agreements. The Committee recognizes that the process thus far has been difficult and that federal, provincial and territorial governments are only now beginning to see the fruits of their

labours. Our goals are to ensure public involvement in the agreement-making process, to improve accountability between governments and to the public at large, and to ensure that the highest possible standards are maintained. If these goals are achieved, both the process and the agreements themselves will be improved.

ADMINISTRATIVE AGREEMENTS UNDER THE *FISHERIES ACT*

The federal *Fisheries Act* is of even greater significance than CEPA for the protection of the marine environment. Sections 35 and 36 are two powerful environmental protection provisions in the statute. Under section 35, it is an offence for any person to carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat unless authorized to do so. Section 36(3) prohibits the deposit of deleterious substances in water frequented by fish unless the deposit is permitted by regulation.

Along with the negotiation of equivalency and administrative agreements under CEPA, Environment Canada and the Department of Fisheries and Oceans (DFO) have been negotiating administrative agreements with the provinces for the control of deposits of deleterious substances under section 36 of the *Fisheries Act*. Among other issues, these agreements deal with reporting deposits of substances into the aquatic environment (releases), sharing information and responsibility for compliance promotion, compliance verification, investigations and enforcement. The agreements allow provincial enforcement officers to be designated as inspectors under the *Fisheries Act*. Under the administrative agreement with Alberta, for example, the province will lead the response to releases except for releases on federal lands, works and undertakings. There will be joint investigations of alleged contraventions of both federal and provincial legislation, but the province will be the lead party in any joint investigation unless otherwise agreed upon. Each government, however, retains the right to prosecute violations of its legislation.

The Minister of Fisheries and Oceans is accountable to Parliament for all components of the *Fisheries Act*. However, the Department of Fisheries and Oceans and Environment Canada share responsibility for administering section 36 (the pollution-prevention provision) of the Act. Environment Canada is involved in enforcing section 36 and in the development of pollution-related regulations under that section.

Although a review of the *Fisheries Act* does not fall within the direct mandate of the Committee, there are four reasons why the Committee believes it should comment on administrative agreements made pursuant to section 36. First, is the role of Environment Canada in administering section 36. Second, is the fact that administrative agreements under the *Fisheries Act* are being negotiated in conjunction with administrative and equivalency agreements under CEPA. Third, is the ongoing discussion(s) related to giving the Minister of the Environment and the Minister of Fisheries and Oceans concurrent legislative authority over the pollution prevention

provisions of the *Fisheries Act*. Fourth, is the fact that the environmental management harmonization initiative now under way under the auspices of the Canadian Council of Ministers of the Environment proposes to transfer responsibility for compliance promotion, compliance verification and enforcement under CEPA and the pollution prevention provisions of the *Fisheries Act* to the provinces. In addition, the Committee believes that the concerns expressed earlier with respect to administrative and equivalency agreements under CEPA apply equally to administrative agreements under the *Fisheries Act*.

While endorsing the concept of administrative agreements under section 36 of the *Fisheries Act*, the Committee has a number of concerns that it believes should be addressed before any new agreements are concluded. The Committee is aware that federal-provincial agreements which delegate responsibility for fish habitat to the provinces may prevent the use of the *Fisheries Act* as a trigger for an environmental assessment under the *Canadian Environmental Assessment Act* (CEEA). The Assistant Deputy Minister, Science (DFO) told the Committee that this was a particular concern for the Department and that DFO wished to preserve the *Fisheries Act* as such a trigger. (70:70) This problem is not new. For example, Franklin Gertler pointed out that one of the reasons the federal government refused to conduct an environmental assessment in relation to the Oldman River Dam was its assertion that the federal environmental assessment guidelines were not applicable because authority for the protection of the fisheries had been transferred to the Province of Alberta under an intergovernmental agreement.²⁶

The Committee also has concerns about the ability and the willingness of the provinces to enforce section 36. The federal government should therefore affirm its role in the protection of the fisheries and maintain its ability to intervene to enforce section 36, where necessary.

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The Committee recommends that before concluding further administrative agreements with the provinces in respect of the pollution prevention provisions (section 36) of the *Fisheries Act*, the Department of the Environment and the Department of Fisheries and Oceans conduct an in-depth review of the impact of these agreements on the *Canadian Environmental Assessment Act* and other federal legislation.

As with administrative and equivalency agreements under CEPA, the Committee believes that administrative agreements under section 36 of the *Fisheries Act* should be subject to greater public scrutiny. Moreover, the Committee notes that the *Fisheries Act* does not contain a provision with respect to administrative agreements similar to section 98 of CEPA. At present, these agreements are negotiated under the general authority of the Minister of Fisheries and Ocean under section 5 of the *Department of Fisheries and Oceans Act*. It is also important that the agreements contain mechanisms

²⁶ *Ibid.*, p. 274.

to ensure that the federal law and regulations are enforced and that provincial authorities are accountable to their federal counterparts for their enforcement activities.

The Committee believes that its recommendations for improving CEPA equivalency and administrative agreements can also improve the administrative agreement process under the *Fisheries Act*.

The Committee recommends that the *Fisheries Act* be amended to provide for:

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- a) authority for the Minister of Fisheries and Oceans and the Minister of the Environment to enter into agreements with the provincial governments with respect to the administration of the pollution prevention provisions of the Act;
- b) publication of proposed administrative agreements with respect to the pollution prevention provisions of the Act in the *Canada Gazette* Part I and in a public registry;
- c) public consultation with respect to the proposed agreements;
- d) publication of the final text of such administrative agreements in the *Canada Gazette* Part II and in a public registry;
- e) detailed annual reporting to Parliament on the administration and enforcement of the *Fisheries Act* and its regulations; and
- f) the insertion of sunset clauses into such administrative agreements requiring a review of the agreements before the expiration of five years.

The Committee recommends that the *Fisheries Act* be amended to provide that administrative agreements with respect to the pollution prevention provisions of the Act be tabled in the House of Commons and reviewed by a Committee of Parliament and that such agreements not take effect until endorsed by a resolution of the House of Commons.

The Committee further recommends that the federal government retain full authority and accountability under administrative agreements to enforce the pollution prevention provisions of the *Fisheries Act*.

The Committee recommends that within 12 months of the presentation of this Report in the House, Environment Canada and the Department of Fisheries and Oceans undertake and complete a public review to develop criteria that must be met before administrative agreements with respect to the pollution prevention provisions of the *Fisheries Act* are signed.

PARLIAMENTARY REVIEW

Section 139 of CEPA provides for the review of the administration of the Act by a committee of Parliament within five years after the statute is enacted.

The Committee notes, however, that CEPA does not provide for further reviews. Parliamentary reviews serve a useful purpose; they ensure that statutes are regularly scrutinized and updated and they give interested groups and individuals the opportunity to make their views known and to recommend changes. The Committee believes that reviews have particular relevance for environmental legislation. CEPA must not languish on the statute books while new concepts and technologies are being applied to environmental protection.

The Committee notes, however, that CEPA does not provide for further reviews. Parliamentary reviews serve a useful purpose; they ensure that statutes are regularly scrutinized and updated and they give interested groups and individuals the opportunity to make their views known and to recommend changes. The Committee believes that reviews have particular relevance for environmental legislation. CEPA must not languish on the statute books while new concepts and technologies are being applied to environmental protection.

It is the Committee's view that CEPA should provide for further parliamentary reviews.

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The Committee recommends that CEPA be amended to require a comprehensive review of the provisions and operation of the Act every five years by the House of Commons Standing Committee on Environment and Sustainable Development or its successor.

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CONCLUSION

Good health and a clean environment are two essential preconditions to our wellbeing. Canadians are justifiably proud that we are one of the healthiest nations in the world. As Canadians, we also take pride in our magnificent natural heritage, such as the Great Lakes, the largest freshwater body in the world, our forests, among the most extensive in the world, and the Arctic, home to much of the world's remaining unsullied wilderness.

Yet we are squandering this unique heritage and putting our own health at risk in the process. Canadians are among the world's worst producers of waste, we have depleted some of our natural resources to the point where the viability of entire communities has been threatened, and we are dumping toxic substances into our environment that not only deform and kill animals but also threaten our own health.

We are unfortunately not alone in abusing the planet or in experiencing the consequences of that abuse. In 1992, over 1500 prominent scientists, including 99 of the 196 living Nobel laureates, warned that "it is no exaggeration to say that the ability of the biosphere to continue to support human life is now in question."¹ Because pollution knows no borders, some of the environmental problems we face come from foreign sources and can only be solved through international action.

The government introduced CEPA eight years ago as the main federal statute to address many of these problems. After a year-long review involving hundreds of witnesses across the country, the Committee concludes that CEPA is not achieving what it was designed to do. Throughout this Report, we have identified several important shortcomings of CEPA: the unacceptably slow assessment and control of toxic substances; the lack of progress by the federal government in cleaning up its own operations; reliance on outdated and inefficient control strategies; and inconsistent and ineffective enforcement. How can the government correct this situation? How can we make things better, not worse, for future generations?

THE WAY FORWARD

The Committee believes that the way forward must be predicated on an approach that is long-term in its vision, preserves ecosystem integrity, prevents pollution, is guided by the precautionary principle, and entrusts to all Canadians the environmental responsibility for their actions.

¹ Union of Concerned Scientists, November 18, 1992, "World Scientists' Warning to Humanity", Washington, D.C.

Long-term Perspective

The necessity to account for the future effects of our decisions was most eloquently expressed to the Committee by Henry Lickers, Director of Environment for the Mohawk Council of Akwasasne. Mr. Lickers reminded the Committee that his people believe that all actions must meet the test that they benefit each of the next seven generations as much as the present one. The Committee agrees that adoption of a long-term perspective is a fundamental precondition to ensuring a sustainable future.

Preservation of Ecosystem Integrity

Respect for ecological integrity requires, at a minimum, conservation of the earth's "life-support systems". These are the ecological processes that keep the planet fit for life. They "shape climate, cleanse air and water, regulate water flow, recycle essential elements, create and regenerate soil, and enable ecosystems to renew themselves".² In practice, this requires maintaining and avoiding irreversible harm to the ability of the environment to act as a provider of resources and services and as a "sink" for wastes.

Pollution Prevention

The most effective way to protect ecosystem and human health is to prevent the generation of polluting substances, rather than continue to try to reduce the environmental and human health risks associated with their use. In short, we must address the root causes of pollution — the economic and social factors driving our society's excessive use of energy and toxic substances and generation of waste — rather than continue to focus on symptoms.

We must also ensure that all government policies work together to create incentives for cost-effective, continuous improvement in pollution prevention. This will require the systematic elimination of inconsistent policies and perverse incentives in all laws and policies at all levels of governance. This will also require governments to set standards and, whenever possible, to provide polluters with the incentive and flexibility to comply with and exceed the standards in the most efficient manner possible.

Precautionary Principle

Maintaining human and ecosystem health also requires that governments not let scientific uncertainty impede action to reduce threats of serious damage.

Stewardship

Finally, this change requires that individuals assume responsibility for the full implications of their actions. This means that producers and users must ensure that the

² International Union for the Conservation of Nature, World Wildlife Fund, United Nations Environment Programme, 1991: *Caring for the Earth: A Strategy for Sustainable Development*.

substances they produce, sell or use do not pose an unacceptable risk to the environment or human health. It also means that individuals must be informed and given the tools to enable them to make ongoing, effective contributions to environmental protection.

IMPLEMENTING CHANGE

The Committee's vision is anchored in the observation that economic prosperity, environmental health and social well-being are all closely inter-related. Its achievement will therefore require a new approach. Economic incentives must be structured to account for environmental and social impacts. Technology development must focus on doing more with less energy and fewer resources. Renewable resources must be managed on a sustainable basis.

With respect to environmental protection, and CEPA in particular, these principles imply a number of important changes:

Leading by Example

A critical prerequisite to the widespread changes required to implement pollution prevention throughout society is for the federal government to lead by example. The federal government must therefore develop regulations to cover all relevant environmental aspects of the Federal House that are not currently regulated. These regulations should serve as models for provincial, territorial and private-sector standards and practices. Further, CEPA should require that all federal departments and agencies develop environmental management plans, modeled on leading international standards for environmental management systems and pollution-prevention planning.

Aggressive Control Of Toxic Substances

CEPA must also be amended to incorporate a more aggressive approach to eliminating the generation and use of the "worst" toxic substances. The Committee is satisfied that enough is known about the dangers associated with persistent, bioaccumulative substances, for example, to require their elimination. Accordingly, CEPA should presume that no new such substances will be admitted to Canada, and that all existing ones will be sunsetted.

Similarly, the Committee believes that Canada should make better use of foreign science and policy processes. Thus, if a province or another OECD country decides to sunset or regulate a substance that is used in or introduced into Canada, CEPA should presume that the same policy will apply in Canada.

For new substances not presumed banned or regulated based on their inherent hazard characteristics or the fact that they have been banned or regulated elsewhere,

CEPA should require proponents to prove that the generation or use of the substance in Canada will not pose an unacceptable risk to the environment or human health.

Risk Assessment Based On The Precautionary Principle

The current risk assessment standard in CEPA imposes too stringent a precondition to the development of measures to prevent or control the generation, use or release of toxic substances. In some cases, the inherent hazard characteristics of a substance should be sufficient to justify regulatory intervention to prevent or strictly control its generation and use.

Effective Enforcement

Enforcement must be stringent and consistent. This will require providing increased powers for CEPA inspectors, creating an arm's length regime to ensure that enforcement action is consistent, and authorizing additional enforcement options, including the adoption of administrative monetary penalties and the use of publicity. Above all, this will require sustained political will.

Efficient Pollution-Prevention Measures

In order to ensure the maximum possible environmental benefit, CEPA should authorize the use of flexible and economically efficient pollution-prevention tools. Thus, for example, CEPA should authorize the use of a wide range of economic instruments.

Promotion of Social Support for Pollution Prevention

In addition to controlling the worst substances and practices, CEPA should encourage the adoption of pollution-prevention practices throughout Canadian society. Specifically, the Committee recommends two main categories of change designed to mobilize public interest and support. First, CEPA should authorize public information and technology transfer initiatives to support pollution prevention. Second, CEPA should increase the opportunities for the public to become involved in policy development processes and in monitoring and holding both government and regulated parties accountable for pollution prevention obligations.

Adequate Funding

Finally, the Committee believes that achievement of the principles set out above will require restored federal funding. The recent budget cuts clearly diminish the capability of the federal government to maintain the level and type of environmental protection activities it currently provides. The Committee believes that Environment Canada has a

critical social and economic mission to fulfill. Both elements of this mission need to be reflected in its funding levels. Therefore, the Committee shares the worry expressed by Bill Andrews, Executive Director of the West Coast Environmental Law Association, that these cuts appear to contradict the apparent need for increased action in light of the scope of the environmental challenge facing Canada. In particular, we believe that adequate resources must be made available for continued federal environmental science, which should be focused increasingly on understanding ecosystem functioning and on developing pollution prevention strategies.

PARTING THOUGHTS

In an ideal world where the ecosystems that sustain life were not threatened, and thus where health and quality of life were also free from environmental risk, we would need neither laws nor regulations to protect our environment.

Beyond the laws and regulations which we must pass and enforce for the time being, the best protection for our health and quality of life in the long term lies in a change of our values and attitude towards what Aboriginal peoples call Mother Earth. We must change our ways of doing and producing, our ways of consuming, in fact the ways by which we run our daily lives.

The environment is too often seen as an impediment to what we call “progress”. And progress is too readily equated to increasing material “wealth”. Yet, when we become truly conscious that environment and wealth are mutually sustaining, when we appreciate that healthy ecosystems bring not only better health and quality of life, but also more sustained and plentiful material well-being, then we will have taken a major step towards becoming a sustainable society.

During our year-long hearings, the Committee welcomed testimony and submissions from a large number of individuals and organizations. Among the most convincing, and often the most moving, were the pleadings of aboriginal representatives on behalf of environmental health and quality of life, and of a holistic approach to governance. For the Aboriginal peoples, the bond with “Mother Earth” is spiritual and holistic. Life and living are one, everything is connected and integrated with everything else.

The Aboriginal peoples find it difficult to understand our traditional ways of governance along vertical lines and in short-term spurts, which often vary from mandate to mandate, and which separate humans from the ecosystem. They view rivers and lakes and waterways as the arteries and veins in the body of the Mother — the clearer they are and the stronger they flow, the healthier the Mother. Forests are the lungs that filter the air we breathe, and the tiniest species have their essential function to play.

Indeed, the human body is a very descriptive analogy for earth and environment and their holistic nature. Even the fittest and strongest athlete is suddenly immobilized by

an injury to a knee, or a broken finger or toe. The whole human body suffers when a lung falters, or the heart weakens, or an artery is blocked.

Yet we continue to act as if we can damage the lungs and arteries and limbs of “Mother Earth” ceaselessly and with impunity. Despite all warnings to change our ways, we continue to waste and pollute, as if Earth had a boundless capacity to remain healthy no matter the abuse and punishment she receives.

However, there are signs of change. Many young Canadians are more aware of the need to live in closer communion with nature and protect the ecosystems that sustain living. They understand holistic approaches and the need to resolve problems and forge creative solutions in the spirit of partnerships. And many appreciate the need for longer-term vision, for the concept of the “seven generations”.

In this report, the Committee has suggested ways of improving CEPA, of using it more effectively to force the pace of change. The Committee urges the reader to read the report as both a prescription for legal and administrative reform and as a contribution towards changing our values and practices.

For whatever improves and benefits the earth, even in a relatively modest way, improves and benefits human health and quality of life — both for ourselves and for the seven generations to come.

RECOMMENDATIONS

CHAPTER 1:

Recommendation No. 1

The Committee recommends that the Government of Canada affirm that it has an important role to play in human health and environmental protection management and, in particular, that it will:

- a) **Promote sustainable development in all its programs and policies.**
- b) **Demonstrate leadership by applying exemplary pollution prevention and environmental assessment practices to its own operations.**
- c) **Provide environmental protection in relation to issues that are assigned to federal jurisdiction by sections 91 and 92.10 of the *Constitution Act, 1867*, such as trade and commerce, sea coasts and inland fisheries, navigation and shipping, Indians and lands reserved for Indians, census and statistics, and interprovincial transportation.**
- d) **Establish national standards for environmental issues of national concern, including products of biotechnology, toxic substances, pesticides, and substances and activities that pose a transboundary threat to the environment.**
- e) **Be the main instrument in conducting and supporting scientific research into environmental and health protection issues.**
- f) **Develop, in consultation with the provinces, territories, Aboriginal peoples and stakeholders where appropriate, pollution prevention and control strategies to protect human health and ecosystems.**
- g) **Ensure that federal regulations are enforced rigorously and uniformly, in collaboration with the provinces and territories where appropriate.**
- h) **Provide leadership in the resolution of issues requiring inter-jurisdictional solutions.**
- i) **Provide leadership in international trade and environment issues and organizations.**
- j) **Promote voluntary action on pollution prevention and sustainable development.**
- k) **Promote the development of “best practices” for environmental protection, including, for example, full cost accounting, environmental management systems, the application of ecosystem approaches and pollution prevention techniques.**
- l) **Publish regular reports on the state of the environment.**

CHAPTER 4:

Recommendation No. 2

The Committee recommends that a strong statement be included in both the Preamble and the Declaration, as well as in the body of the Act to the effect that the primary objective of CEPA is to contribute to the goal of sustainable development. CEPA should define sustainable development to mean development that meets the needs of the present without compromising the ability of the “next seven generations” to meet their own needs. It requires the adoption of the principles of pollution prevention, the ecosystem approach, biodiversity, the precautionary principle, and user/producer responsibility. These principles apply to the realization of the objective of the Act and govern the interpretation of the Act as a whole.

Recommendation No. 3

The Committee recommends that pollution prevention be a guiding principle of the Act. We also recommend that a strong statement be included in the Declaration to the Act, to the effect that the purpose of CEPA is to contribute to the goal of sustainable development through pollution prevention. In addition, we recommend that the Preamble clearly establish pollution prevention as the priority approach to environmental protection. For the purposes of the Act, pollution prevention shall mean the use of processes, practices, materials, products or energy that avoid or minimize the generation and use of pollutants and waste. This should be done without shifting or creating equal or greater risks to human health or the environment.

Recommendation No. 4

The Committee further recommends that the federal government ensure that mechanisms are in place to protect workers and communities during the transition to cleaner production processes and products. These mechanisms should be developed in close consultation with labour organizations and community leaders. Workers and communities should also be given a legitimate role in all decisions pertaining to the planning for transition.

Recommendation No. 5

The Committee recommends that the ecosystem approach be adopted as a guiding principle of CEPA and that the concept be introduced fully into the Preamble and the Definitions. The Committee also recommends that Part I authorize the development of ecosystem health goals, objectives and indicators, and that the definition of “environment” be amended to include explicit reference to ecosystem integrity. The Act should define ecosystem as a dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit. The Act should define ecosystem approach to mean administering the Act in a manner that maintains the functional integrity of ecosystems.

Recommendation No. 6

The Committee recommends that biological diversity be incorporated in CEPA as a guiding principle. We recommend that the Preamble include a reference to Canada's international obligations in respect of the Convention on Biological Diversity, including its definition of biological diversity. The Act should define "biological diversity" as the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, among species and of ecosystems. We also recommend that the words "including associated biological diversity" be added to the reference to ecosystem integrity in the new definition of "environment" in CEPA.

Recommendation No. 7

The Committee recommends that the precautionary principle be incorporated in CEPA as a guiding principle and that it be included in the Preamble. The Committee further recommends that an interpretive provision be included in the Act stating that all parts of CEPA shall be interpreted in accordance with the precautionary principle. CEPA should define the precautionary principle to mean that, in respect of all substances suspected of posing a serious threat to the environment or to human health on the basis of weight of evidence, lack of full scientific certainty shall not be sufficient reason for postponing preventive or remedial measures.

Recommendation No. 8

The Committee recommends that the concept of user/producer responsibility be incorporated in CEPA as a guiding principle. We also recommend that a statement be included in the Preamble indicating that particular attention be paid to the principle of user/producer responsibility when interpreting the provisions of the Act.

CHAPTER 5:**Recommendation No. 9**

The Committee recommends that section 11 of CEPA be amended to allow for the use of an inherent toxicity approach (as well as a risk-assessment approach) in determining whether a substance should be designated as toxic under the Act. For example, section 11 could be written as follows:

- 11.1. For the purposes of this Part, and subject to s. 11.2, a substance is toxic if it:**
- a) has or may have an immediate or long-term harmful effect on the environment;**
 - b) constitutes or may constitute a danger to the environment on which human life depends; or**

- c) constitutes or may constitute a danger in Canada to human life or health.

11.2. The Governor in Council shall promulgate regulations prescribing the standard of assessment to be followed to determine whether a substance:

- a) has or may have an immediate or long-term harmful effect on the environment;
- b) constitutes or may constitute a danger to the environment on which human life depends; or
- c) constitutes or may constitute a danger in Canada to human life or health.

Recommendation No. 10

The Committee recommends that the precautionary principle guide both the risk and hazard assessment of substances under CEPA. We further recommend that the Ministers of Environment and Health appoint a representative working group of stakeholders and departmental officials to make recommendations as to how the precautionary principle should be applied in CEPA's risk and hazard assessment processes for new and existing substances. The working group should be appointed within six months of the publication of the Committee's Report, and make recommendations to the Ministers within one year after its appointment.

Recommendation No. 11

The Committee recommends that section 15 of Part II of CEPA be amended to make explicit reference to the ecosystem approach in the risk assessment of substances under the Act.

Recommendation No. 12

The Committee recommends that the federal government should continue to support environmental science, which should be focused increasingly on understanding ecosystem functioning and on developing risk-reduction strategies to support pollution prevention.

Recommendation No. 13

The Committee recommends that CEPA be amended to deem a sunset of any substance on the Domestic Substances List that has been sunsetted or banned in any Canadian province, or in any member nation of the Organization for Economic Cooperation and Development.

Recommendation No. 14

The Committee recommends that CEPA be amended to require that a regulation be promulgated under the Act defining threshold criteria for the properties of persistence

and bioaccumulative potential for substances that come under the Act. The Committee further recommends that a criterion for “inherent toxicity” be developed for use in conjunction with the criteria of persistence and bioaccumulation, and included in the same regulation. These criteria should be based on the most stringent criteria currently in use.

Recommendation No. 15

The Committee further recommends that CEPA be amended to provide that any substance on the Domestic Substances List that meets or exceeds the prescribed regulatory criteria shall be deemed to be sunsetted under the Act.

Recommendation No. 16

The Committee recommends that CEPA be amended to provide that, for those substances on the Domestic Substances List that are deemed to be sunsetted under CEPA for the reasons described above, the proponent shall be granted an opportunity to appeal to the Ministers of the Environment and Health and state extraordinary reasons why the substance in question should not be sunsetted under the Act, and should instead continue to be used for specific purposes.

Recommendation No. 17

The Committee recommends that CEPA be amended to provide that, where a proponent's appeal in respect of a substance deemed sunsetted under CEPA is accepted by the Ministers, the Ministers shall be authorized to declare the substance to be toxic under CEPA and subject to regulation under the Act.

Recommendation No. 18

The Committee recommends that CEPA be amended to presume a toxic designation for any substance on the Domestic Substances List that is regulated in any Canadian province, or in any member nation of the Organization for Economic Cooperation and Development. The substance shall then be subject to regulation under CEPA unless the proponent can demonstrate to the satisfaction of the Ministers of the Environment and Health that there are extraordinary reasons why the substance should not be regulated.

Recommendation No. 19

The Committee recommends that the Minister of the Environment and the Minister of Health refocus their risk assessment efforts for Priority Substances more in the direction of classes of substances, effluents and waste streams, while continuing to assess single substances which are of concern.

Recommendation No. 20

The Committee recommends that CEPA be amended to provide a “stop clock” provision so that, in a case where there is insufficient information to complete the

assessment of a Priority Substance, a) the Ministers of the Environment and Health can compel proponents of a substance to produce the required information and b) the statutory time limit for completing the assessment will not apply while the information is being collected. The Act should provide that, once the necessary information has been developed to complete the assessment, the “clock is restarted” and the assessment continues under the statutory time limit. The Committee further recommends that, where the necessary information is deemed unlikely to be forthcoming within one year, the Act should authorize the Ministers to declare the substance in question to be toxic under CEPA and to control the substance.

Recommendation No. 21

The Committee recommends that, where a substance has been assessed and designated as toxic under CEPA, the government shall promulgate whatever control measures are appropriate for that substance within a period of two years after the date that said toxic designation was made.

Recommendation No. 22

The Committee recommends that the principle of user/producer responsibility be fully applied to new substances prior to their acceptance for use in Canada. Proponents of new substances shall be responsible for providing environmental and health data to support the use of their product(s) in Canada. New substances shall not be introduced into Canada until the proponent has demonstrated, in a manner consistent with the precautionary principle, that the substances do not pose an unacceptable risk to the environment or human health.

Recommendation No. 23

The Committee recommends that section 26 of CEPA, in respect of new substances, be amended to require the assessment of transient reaction intermediates; impurities, contaminants and partially unreacted chemicals; and various reaction products of new substances which appear during storage or after release into the environment.

Recommendation No. 24

The Committee recommends that CEPA be amended to require that all new substances be assessed for persistence and bioaccumulation and inherent toxicity using the criteria thresholds established by regulation under the Act.

Recommendation No. 25

The Committee recommends that CEPA be amended to provide that any new substance that meets or exceeds the established regulatory criteria for persistence, bioaccumulation, and inherent toxicity shall be deemed to be banned under the Act, unless the proponent can demonstrate to the satisfaction of the Ministers of the Environment and Health that there are extraordinary reasons justifying the introduction of the new substance for a specific purpose.

Recommendation No. 26

The Committee recommends that CEPA be amended to authorize the Ministers of the Environment and Health to declare a deemed ban of any new substance that is banned in any Canadian province, or in any member nation of the Organization for Economic Cooperation and Development, unless the proponent can demonstrate extraordinary reasons to the satisfaction of the Ministers that the new substance in question should not be banned.

Recommendation No. 27

The Committee recommends that CEPA be amended to provide that, where a proponent's appeal in respect of a new substance deemed banned under CEPA is accepted by the Ministers, the Ministers shall be authorized to declare the substance to be toxic under CEPA and subject to regulation under the Act.

Recommendation No. 28

The Committee recommends that, where a new substance is declared to be toxic under CEPA, that new substance will be admitted into Canada only if the proponent can demonstrate to the Ministers of the Environment and Health that there are extraordinary reasons to permit specific uses. The Committee further recommends that, in every case where the Ministers agree to a specific use or uses, the new substance shall be admitted and control measures shall be promulgated under CEPA to define the conditions of the generation, use and release for that new substance.

Recommendation No. 29

The Committee recommends that CEPA should require proponents of existing substances to report to the Minister all significant new uses of those substances that come under the purview of the Act. The Committee further recommends strict enforcement of section 17 of CEPA, which requires that a proponent who obtains information that "reasonably supports the conclusion that the substance is toxic or capable of becoming toxic" must provide that information to the Minister.

Recommendation No. 30

The Committee recommends that, where a substance has been assessed as "not toxic", Environment Canada and Health Canada shall, in cooperation with proponents and stakeholders, develop a system requiring proponents of the substance to provide pertinent information on any significant changes in the *exposure pattern* of that substance to an extent that might require a re-assessment of its "not considered toxic" designation under the Act.

CHAPTER 6:**Recommendation No. 31**

The Committee recommends that CEPA require producers and users of substances declared or deemed toxic under CEPA, including substances subject to sunseting, to produce pollution prevention plans.

Recommendation No. 32

The Committee recommends that CEPA require waste exporters to have plans for phasing-out the production of the hazardous waste being exported.

Recommendation No. 33

The Committee recommends that CEPA be amended to provide broad enabling authority for the use of economic instruments.

Recommendation No. 34

The Committee recommends that the government implement the recommendations in the Final Report of The Task Force on Economic Instruments and Disincentives to Environmentally Sound Practice, and continue the important work begun by the Task Force to ensure that barriers are eliminated and appropriate economic instruments are implemented.

Recommendation No. 35

The Committee recommends that funds generated from fines and charges authorized under CEPA be directed to the environmental fund recommended in Chapter 14.

Recommendation No. 36

The Committee recommends that:

- a) in the context of managing substances declared or deemed to be toxic under CEPA, non-regulatory measures be used strictly as a supplement to, and not as a replacement for, regulations or economic instruments;
- b) the federal government continue to encourage voluntary initiatives, such as the Canadian Chemical Producers' Association's Responsible Care Program, to promote pollution prevention; and
- c) the federal government continue to explore and study the use of non-regulatory measures and, in particular, to learn more about when and how to use them and what accountability mechanisms are required to ensure that they effectively prevent the generation, use and release of toxic substances.

Recommendation No. 37

The Committee recommends that CEPA be amended to include enabling powers for sunseting substances.

Recommendation No. 38

The Committee recommends that the federal government continue to encourage negotiated challenge targets for pollution reduction.

Recommendation No. 39

The Committee recommends that the National Pollutant Release Inventory be revised to include reporting requirements that will enable the federal government to measure progress toward the implementation of pollution prevention initiatives and the attainment of various pollution prevention targets.

Recommendation No. 40

The Committee recommends that Part I of CEPA be amended to authorize the Minister to develop model pollution prevention planning guidelines and to encourage the development of voluntary pollution prevention planning.

Recommendation No. 41

The Committee recommends that subsections 7(1)(c), (e) and 7(3) in Part I of CEPA be amended to include the word “prevention” before the phrase “control and abatement of environmental pollution”.

Recommendation No. 42

The Committee recommends that the federal government reinstate the previously announced funding for the Canadian Environmental Industry Strategy.

Recommendation No. 43

The Committee recommends that Part I of CEPA authorize the establishment of a national pollution prevention information clearinghouse and of award programs highlighting success stories.

Recommendation No. 44

The Committee recommends that the federal government reinforce rather than weaken its environmental public awareness programs.

Recommendation No. 45

The federal government should explore with the provinces the possible benefits of integrated permitting strategies.

Recommendation No. 46

The Committee encourages the federal government to learn about and consider applying “extended producer responsibility” policies to firms that use substances that are regulated under CEPA.

CHAPTER 7:**Recommendation No. 47**

The Committee recommends that Part VI of CEPA be amended to include explicit references to the polluter-pays principle, the ecosystem approach, the precautionary principle and the pollution prevention principle.

Recommendation No. 48

The Committee recommends that Part VI of CEPA be amended to forbid ocean dumping of any substance not on an exclusive list of authorized substances.

Recommendation No. 49

The Committee recommends that Part VI of CEPA be amended to require permit applicants to prove that ocean dumping is the best option from an environmental perspective.

Recommendation No. 50

The Committee recommends that the forthcoming Waste Assessment Framework of the London Convention, 1972 be made an official part of the Act by incorporating it into Schedule III Part III of CEPA.

Recommendation No. 51

The Committee recommends that Part VI of CEPA be linked more explicitly to Part I (Environmental Quality Objectives), Part II (Toxic Substances) and Part III (Nutrients), and any other appropriate parts of the Act.

Recommendation No. 52

The Committee recommends that Part VI of CEPA be amended to allow for increases in permit fees, to cover at least the full cost of public consultation, monitoring and enforcement.

Recommendation No. 53

The Committee recommends that the Department of the Environment review its fee structure for ocean dumping permits and strongly recommends that, within one year of the presentation of this Report to the House, the Department adopt a sliding fee scale to reflect the nature and quantity of wastes being dumped.

Recommendation No. 54

The Committee recommends that the definition of “ocean dumping” in Part VI be amended to include the disposal of substances from wharves and in intertidal zones. The Committee further recommends that the definition include the destruction and subsequent disposal at sea of artificial islands and other manufactured structures.

Recommendation No. 55

The Committee recommends that individuals and/or communities likely to suffer adverse effects as a result of dumping be enabled to participate in the general planning process for selecting ocean dump sites.

Recommendation No. 56

The Committee recommends that, within two years of this Report being presented to the House, the Department of the Environment initiate a process to include environmentally sound, practicable and effective regional solutions for disposal of contaminated sediment, and ensure that both the general public and the economic stakeholders concerned have an opportunity to participate in the process.

Recommendation No. 57

The Committee recommends that Part VI of CEPA be amended to incorporate Schedule III, Part I and Part II.

Recommendation No. 58

The Committee recommends that, prior to any transfer of responsibility with respect to Part VI of CEPA, the Department of Environment conduct an in-depth review of the impact that the transfer could have on the obligations and capability of the Minister of the Environment to protect the environment, including the Arctic environment.

Recommendation No. 59

The Committee recommends that, if the provisions of Part VI of CEPA are transferred to another statute, the recommendations in this chapter with respect to amendments to Part VI be included in the new Act.

Recommendation No. 60

The Committee recommends that if the provisions of CEPA applicable to CZM are transferred to another statute, the recommendations in this chapter on CZM be included in the new Act.

Recommendation No. 61

The Committee recommends that the federal government lead in the formulation of a national coastal zone management policy.

Recommendation No. 62

The Committee recommends that the existing federal legislative framework, including Part VI of CEPA, be evaluated and amended to favour coastal zone management.

Recommendation No. 63

The Committee recommends that Part I of CEPA be amended to authorize the formulation of environmental objectives and codes of practice to preserve the quality of coastal ecosystems and to prevent land-based sources of marine pollution. Part I should also authorize CZM-based research and monitoring.

Recommendation No. 64

The Committee recommends that the federal government amend CEPA to add to Part V provisions authorizing the federal government to prevent transboundary water pollution and to ensure that Canada complies with international agreements relating to transboundary water pollution.

CHAPTER 8:**Recommendation No. 65**

The Committee recommends that within one year of the tabling of this Report the Department of the Environment regulate the phosphate content of cleaning agents other than laundry detergents under Part III of CEPA. The Committee further recommends that Environment Canada determine whether regulation is required for nutrients in cleaning agents other than phosphates.

Recommendation No. 66

The Committee recommends that by December 31, 1996, Environment Canada determine whether sources of nutrients other than cleaning agents are adequately regulated by the provinces and territories, and if they are not, that the powers of Part III be broadened to include these other nutrient sources.

Recommendation No. 67

The Committee recommends that the definition of “nutrients” as set out in section 49 be modified as follows:

- i) delete part a), and replace it with “interfere with ecosystem health and functioning”, and
- ii) in part b), delete the phrase “that is useful to human beings”.

Recommendation No. 68

The Committee recommends that CEPA be amended to include a new Part to deal specifically with products of biotechnology. This new Part will include minimum notification and assessment standards for *all* products of biotechnology released into the environment, including those regulated under other federal Acts. Other federal statutes shall prevail over CEPA in regard to the environmental impact assessment of products of biotechnology only if their notification, assessment and regulatory standards are at least equivalent to those prescribed under CEPA.

Recommendation No. 69

The Committee recommends that CEPA be amended to require the Governor in Council to publish a list of statutes considered to be at least equivalent to CEPA with respect to their assessment process for products of biotechnology.

Recommendation No. 70

The Committee recommends that Sections 46 and 47 of CEPA be reviewed and amended to empower the Minister to make regulations in respect of fuels and fuel additives quickly and efficiently, based on a weight of evidence approach.

Recommendation No. 71

The Committee further recommends that the reference to "combustion" in section 47 of CEPA be removed, that the word "significant" be deleted and that "would" be changed to "may", so that the section will read, in part: "(a) prescribing, with respect to any fuel or fuel used for any purpose, the concentration or quantity of any element, component or additive that, in the opinion of the Governor in Council, if exceeded, may in ordinary circumstances, result in a contribution to air pollution".

Recommendation No. 72

The Committee recommends that legislative authority for vehicle emissions be transferred from the *Motor Vehicle Safety Act* and Transport Canada, to the *Canadian Environmental Protection Act* and Environment Canada, thus consolidating authority for fuels, fuel additives and vehicle emissions under a single federal Act.

Recommendation No. 73

The Committee recommends that CEPA be amended to ensure that the same health and environmental standards for fuels and fuel additives that are applied in Canada are applied to fuels and fuel additives destined for export to other countries.

Recommendation No. 74

The Committee recommends that the Minister of the Environment take regulatory action under CEPA with the goal of eliminating by May 31, 1997, the import, sale, manufacture, and use of lead shot in Canada.

Recommendation No. 75

The Committee recommends that the Minister of the Environment initiate regulatory action under CEPA to prohibit by May 31, 1997, the import, sale, manufacture, and use of lead sinkers and jigs that are less than or equal to 2.5 cm in all dimensions.

Recommendation No. 76

The Committee recommends that Environment Canada study the feasibility and desirability of regulating radioactive substances under the *Canadian Environmental Protection Act* and report back to the Committee within three years of the tabling of this Report.

Recommendation No. 77

The Committee recommends that the Minister of Environment Canada establish National Ambient Air Quality Objectives for dioxins and furans.

Recommendation No. 78

The Committee recommends that the Minister of the Environment promulgate regulations under CEPA controlling the emissions of dioxins and furans from incinerators and from other significant sources in Canada through the use of the best available control technologies.

Recommendation No. 79

The Committee recommends that the Government of Canada pursue negotiations with the Government of the United States under the terms of the Canada-United States *Air Quality Accord* to reduce dioxin and furan emissions from all relevant sources in the United States which may affect the Canadian environment.

Recommendation No. 80

The Committee recommends that by June 30, 1998;

- a) Environment Canada establish an inventory containing comprehensive and consistent information on the number and characteristics of all federal contaminated sites;
- b) the federal government complete an action plan and schedule for the clean-up of all high risk federal contaminated sites;
- c) Environment Canada, in cooperation with the provincial and territorial governments, complete a national inventory containing comprehensive and consistent information on the number and characteristics of all contaminated sites in Canada; and
- d) Environment Canada, in cooperation with the provincial and territorial governments, resolve the present situation of uncertain legal liability for contaminated sites. Any such resolution should be based on the polluter pays principle.

Recommendation No. 81

The Committee recommends that Environment Canada conduct an in-depth study to determine whether methylmercury released into the aquatic environment as a result of the creation of reservoirs should be regulated under CEPA.

CHAPTER 9:**Recommendation No. 82**

The Committee recommends strongly that the federal government meet:

- (a) its international commitment to stabilize greenhouse gas emissions at 1990 levels by the year 2000, and that it utilize Part V of CEPA, where appropriate, to do so; and

- (b) the promise in *Creating Opportunity* to improve energy efficiency and increase the use of renewable energies with the aim of cutting carbon dioxide emissions by 20 percent from 1988 levels by the year 2005.

Recommendation No. 83

The Committee recommends that CEPA and its regulations be amended to fulfil Canada's new commitments under the Basel Convention to ban immediately all exports of hazardous waste destined for disposal to non-OECD countries, and to phase out the exports of hazardous waste to non-OECD countries destined for recovery-recycling operations by the end of 1997.

Recommendation No. 84

The Committee recommends that CEPA be expanded to include the authority to implement Canada's commitment under the Canada-U.S.A. Agreement on the Transboundary Movement of Hazardous Waste to control the movement of non-hazardous solid waste to or from the United States.

Recommendation No. 85

The Committee strongly encourages the Minister of the Environment to take an active part in relevant multilateral and bilateral organizations to ensure that:

- a) the environmental agenda is upheld within bilateral and multilateral trade negotiations; and
- b) international trade agreements respect Canada's right to develop and implement appropriate domestic environmental protection measures.

CHAPTER 10:

Recommendation No. 86

The Committee recommends that CEPA be amended to include enabling provisions for dealing with environmental emergencies. In particular, the Committee recommends that CEPA guarantee a federal "safety net" that would compensate for the shortcomings of other federal acts.

Recommendation No. 87

The Committee recommends that the new provisions in CEPA incorporate by reference the standards, codes and guidelines related to prevention, preparedness, response and recovery that have been developed by the Major Industrial Accidents Council of Canada (MIACC) and other multi-stakeholder associations.

Recommendation No. 88

The Committee recommends that federal departments, boards and agencies, federal works and undertakings, Crown corporations (as set out in Schedule III of the

Financial Administration Act), federal regulatory bodies and federal lands that hold hazardous substances in quantities that exceed prescribed thresholds, be subject to registration and spill-reporting requirements, as well as the prevention, preparedness, response and recovery requirements referred to in the new provisions of CEPA recommended above.

Recommendation No. 89

The Committee recommends that, by December 31, 1996, the federal government initiate discussions with the provincial and territorial governments to develop a national, single-window system for the registration of all sites containing hazardous substances in quantities exceeding prescribed thresholds.

Recommendation No. 90

The Committee recommends that, by December 31, 1996, the federal government initiate discussions with the provincial and territorial governments to develop a national spill-reporting network.

Recommendation No. 91

The Committee recommends that CEPA be amended to authorize a civil cause of action to recover all reasonable costs and disbursements incurred to prevent, repair, remediate or minimize damage caused to the environment by spills or releases. Further, the Committee recommends that CEPA be amended to authorize a civil cause of action to recover damages for loss of access to or enjoyment of the environment because of spills or releases.

CHAPTER 11:

Recommendation No. 92

The Committee recommends that Part IV of CEPA be amended :

- a) to eliminate the existing requirement for ministerial concurrence under section 54;
- b) to authorize the Governor in Council, on the advice of the Minister of the Environment, to make environmental regulations including, but not limited to, regulations regarding emissions, effluents, wastes, releases, the management of storage tanks, self-monitoring by regulatees, the conduct of environmental audits and the clean-up of federal contaminated sites. These regulations should be developed within three years of the coming into force of the amending legislation.
- c) to extend the regulatory authority under section 54 to all federal entities, federal works and undertakings and federal lands, including tenants occupying federal lands, but excluding aboriginal lands and reserves; and

- d) to give precedence to the provisions of Part IV and regulations made thereunder by expressly stipulating that, in the case of a conflict or inconsistency with another federal statute or regulation, the provisions and regulations made under Part IV are to prevail to the extent of the conflict or inconsistency.

Recommendation No. 93

The Committee recommends that a new section be added under Part IV permitting the adoption by reference of provincial/territorial environmental standards. Should the regulatory regime of a particular province or territory be incomplete, the Committee further recommends that all gaps be filled by the adoption by reference of the best of the regulations implemented in the other jurisdictions.

Recommendation No. 94

The Committee recommends that section 53 be amended to authorize the development of codes of practice and environmental quality objectives, as well as guidelines but that these instruments be used only as a supplement to matters also dealt with by regulation or with respect to matters that cannot be addressed adequately by regulation.

Recommendation No. 95

The Committee recommends that:

- 1) a new section be added under Part IV of CEPA to require all federal entities covered under this Part to develop environmental management plans based on the forthcoming ISO 14000 standards or, if such standards have not been finalized, on the Canadian Standard Association standards or on the British Standards Institute's BS 7750.
- 2) The environmental management plans required under Part IV should be completed and laid before the House of Commons within two years of the enabling legislation coming into force, and revised and laid before the House of Commons every three years thereafter.

Recommendation No. 96

The Committee recommends that a senior management official be designated from within each federal department, agency, board, commission and Crown corporation and regulatory body, who would be responsible for environmental management.

CHAPTER 12:

Recommendation No. 97

The Committee recommends that self-government and land claim settlement agreements negotiated between the Government of Canada and Aboriginal peoples include provisions to establish environmental protection regimes, and provide adequate authority and resources for the implementation of such regimes, where Aboriginal peoples seek to establish control over environmental protection on their lands.

Recommendation No. 98

The Committee recommends that by June 30, 1997 the Department of the Environment, the Department of Indian Affairs and Northern Development, and Aboriginal peoples establish a framework to discuss CEPA and the process for amending the Act as it relates to Aboriginal peoples who do not have comprehensive environmental management regimes in place pursuant to self-government or land claim settlement agreements.

Recommendation No. 99

The Committee recommends that Aboriginal peoples be consulted with respect to the formulation of guidelines, objectives and codes of practice under Part I of CEPA and the establishment of the Priority Substances List.

Recommendation No. 100

The Committee recommends that the Government of Canada provide financial and other support to Aboriginal peoples for capacity-building in the area of environmental protection, including training in the areas of environmental emergencies, monitoring, testing, analysis and enforcement.

Recommendation No. 101

The Committee recommends that Aboriginal peoples be included as participants in the environmental management harmonization initiative of the Canadian Council of Ministers of the Environment.

Recommendation No. 102

The Committee recommends that the federal, provincial and territorial governments, and Aboriginal peoples who have comprehensive environmental management schemes in place pursuant to self-government or land claim settlement agreements, work as equal partners to co-ordinate their respective environmental management regimes.

Recommendation No. 103

The Committee recommends that paragraph 2(h) of CEPA be amended to include a reference to traditional or local indigenous knowledge.

CHAPTER 13:**Recommendation No. 104**

The Committee recommends that the federal government

- a) continue to promote the creation of the Arctic Council as the circumpolar forum for the discussion of Arctic issues and maintain its current active participation in the Arctic Environmental Protection Strategy (AEPS);
- b) use all available international means to pursue further reductions in the emissions of toxic substances from other countries that are deposited in the Canadian Arctic;
- c) provide technical assistance to Russia to identify the scope and nature of environmental contaminants, including radionuclides, that threaten Canada.

Recommendation No. 105

The Committee recommends that the Minister of Indian Affairs and Northern Development review current exemptions to the administration of the Territorial Land Use Regulations to ensure a higher level of environmental protection.

Recommendation No. 106

The Committee recommends that, in collaboration with the territorial governments and affected aboriginal organizations, the federal government extend the Arctic Environmental Strategy, establish a timetable and allocate the resources needed to finish cleaning up abandoned industrial and military sites that are contaminated with toxic substances.

Recommendation No. 107

The Committee recommends that the Minister of the Environment and the Minister of Health conclude their determination of the measures they plan to apply to arsenic by December 1995.

Recommendation No. 108

The Committee recommends that developers be required to remove any hazardous wastes they generate. Ocean dumping and land burial of non-hazardous wastes should be permitted only where the proponent has demonstrated that no other more environmentally sound option exists.

Recommendation No. 109

The Committee recommends that the federal government

- a) reinstate funding for the Polar Continental Shelf Project;
- b) maintain its current research effort on northern contaminants;
- c) work with the territorial governments, aboriginal groups and the Canadian Polar Commission to improve the communication of scientific information to northern residents; and
- d) increase its understanding of traditional ecological knowledge and its use in resource planning and management.

Recommendation No. 110

The Committee recommends that Environment Canada re-examine its current role in the North in light of the settlement of aboriginal claims, the devolution of responsibilities to the territorial governments and the division of the Northwest Territories. The Committee further recommends that Environment Canada re-establish as soon as possible a local environmental protection presence in Nunavut.

CHAPTER 14:**Recommendation No. 111**

The Committee recommends that:

- 1) CEPA be amended to require the establishment of a public registry of information in an electronic format, which would be accessible on the Internet and which would provide, at a minimum, information concerning the data comprised in the National Pollutant Release Inventory; monitoring, inspection and enforcement data; information submitted to the government under the notification provisions; information gathered under Part II or relied on to determine the toxicity of substances; applications for and the contents of ocean dumping permits issued under Part VI; proposed and final texts of all federal/provincial/territorial harmonization, equivalency and administrative agreements; proposed and final texts of all environmental quality objectives, guidelines and codes of practice, regulations and regulatory impact statements; environmental management plans; and pollution-prevention plans.
- 2) The Committee further recommends that authority be provided under CEPA to adopt cost recovery measures to help offset some of the costs related to the electronic public registry.

Recommendation No. 112

The Committee recommends that:

- a) CEPA be amended to require that notice be given in relation to, and that the public be afforded a reasonable opportunity to comment on, all proposed regulations, environmental quality objectives, guidelines, codes of practice, agreements, permits and other matters dealt with under the Act.
- b) A 60-day period for comments be prescribed in all cases, except where, pursuant to well defined criteria under the Act, the Minister determines that an emergency exists and therefore a shorter notice period or no notice is justified.
- c) The Minister be expressly required to consider the comments that were made by the public and provide a written summary outlining how these comments were taken into account.

Recommendation No. 113

The Committee recommends that:

- a) CEPA be amended to allow a notice of objection to be filed with respect to:
 - the addition of substances to the Domestic Substances List;
 - the removal of substances from the Priority Substances List before a determination is made with respect to their toxicity;
 - the waiving of information requirements;
 - the approval with conditions or when prohibitions or conditions regarding substances suspected of being “toxic” are varied or rescinded;
 - the approval of field tests in relation to new substances, particularly those involving open release into the environment;
 - the issuance of an ocean dumping permit or a variation of its terms and conditions.
- b) CEPA be amended to require the Minister of the Environment to establish a Board of Review in the foregoing cases unless the Minister considers that the request for review is frivolous or vexatious.
- c) CEPA be further amended to allow two residents of Canada to request a review of existing policies, regulations or other instruments on the ground that they are inadequate, and the Minister should be required to accede to such requests provided the impugned policy, regulation or

other instrument has been in place for more than five years and provided the Minister does not consider the request for review to be frivolous or vexatious.

- d) CEPA be further amended to enable two residents of Canada to request a review in relation to substances assessed as “toxic”, but for which regulations or other measures have not been promulgated within two years following completion of the toxicity assessment. The Minister should be required to accede to such a request for review unless he or she determines that the request is frivolous or vexatious.
- e) Where a request has been made for a review under parts a, c and d of this recommendation, the Minister should be required to respond formally to such requests within 60 days and provide written reasons if the request is disallowed on the ground that it is frivolous or vexatious.
- f) Parts a) through e) of this Recommendation should also apply to products of biotechnology, with all necessary adjustments made to take into account the different nature of those products.

Recommendation No. 114

The Committee recommends that CEPA be amended to:

- give the National Pollutant Release Inventory (the NPRI) an explicit statutory basis.
- require that detailed information be provided under the NPRI in relation to the pollutants released into the environment; the pollutants released into the waste stream prior to their being treated, recycled or incinerated; the pollutants transferred off-site for treatment, storage or disposal; the quantities of pollutants generated, used and stored at facilities; and the details of the pollution-prevention initiatives undertaken with respect to the listed pollutants, including pollution-prevention plans, source reduction strategies, etc.
- require specialized reporting regimes in relation to key pollutants, such as pesticides, persistent and bioaccumulative toxic substances, ozone depleting substances and climate change gases.

The Committee further recommends that

- the exemption for small businesses be based on the absence of environmental significance of the substances used rather than on the size of the firm, that the reporting threshold be lowered to 4.5 tonnes and that all other exemptions be kept to a minimum and gradually phased out.
- As far as possible the NPRI be harmonized with the American Toxic Release Inventory (TRI).

- The NPRI be compiled and published annually, and that the NPRI requirements be revised and updated every three years.
- An advisory committee, comprising representatives from industry, labour, the environment, Aboriginal peoples and the two levels of government, be established to advise the Minister on the changes that should be made to the NPRI within the parameters of the foregoing terms of reference.

Recommendation No. 115

The Committee recommends that the disclosure provisions under CEPA be strengthened by providing a narrow definition for the term “confidential”; requiring that claims for confidentiality be accompanied by supporting evidence; specifying the types of information for which confidentiality claims cannot be made; providing a review process for claims of confidentiality; and by making it an offence to make a frivolous claim, punishable by a fine of up to \$25,000.

Recommendation No. 116

The Committee recommends that:

- a) A general whistleblower protection provision be added under Part VII of CEPA to protect from disclosure the identity of all persons who, in good faith, report or propose to report any offence or violation under the Act or regulations, or likely or probable offence or violation under the Act or regulations, if such persons request anonymity.
- b) CEPA be further amended to protect all federally-regulated employees from being dismissed, harassed or disciplined in the workplace for reporting in good faith any offence or violation under the Act or regulations, or likely or probable offence or violation under the Act or regulations, or who propose to do so.
- c) CEPA be further amended to provide that the foregoing protection be granted to persons or employees who, in good faith, make their report or propose to make their report to someone other than a CEPA inspector.

Recommendation No. 117

The Committee recommends that:

- a) Environment Canada publish a pamphlet on CEPA to educate members of the public on the purposes of the Act and to inform them of the rights and remedies provided to them under the Act, including the right of residents under section 108 to request an investigation of a suspected violation.
- b) Section 109 of CEPA be amended to require that the Minister provide a detailed final report to the applicants, whether or not legal action has been taken.

- c) Environment Canada develop a form for applications under section 108 and that applicants be provided, on request, with assistance in drafting their “application” and with the services of a swearing-in officer.

Recommendation No. 118

The Committee recommends that a mechanism be provided under CEPA to compensate any person who has suffered loss or damage as a result of activities authorized under the Act.

Recommendation No. 119

The Committee recommends that:

- a) CEPA be amended to permit citizen suits that would entitle any person to commence a civil action against a party who has violated, or is about to violate, a provision of the Act or regulations, the breach of which has resulted in, or could result in, significant harm to the environment.
- b) Civil suits be allowed to proceed only if an application requesting the investigation of the alleged offence has first been made under section 108 of the Act, and the court determines that the Minister took an unreasonable amount of time to respond to the request or that the Minister’s response was unreasonable.
- c) The plaintiff be required to serve notice of the action on the Attorney General for Canada, who may be made a party to the action.
- d) Where the action succeeds, the Court be empowered to order an injunction against the defendant or order the defendant to take remedial action, order the parties to negotiate a restoration plan, order the defendant to pay damages into the special environmental fund to be established under CEPA, and order the partial or full recovery of the plaintiff’s costs.

Recommendation No. 120

The Committee recommends that the federal government be encouraged to provide in CEPA a civil remedy for the creation of environmental risk, where the measure of damages would be proportional to the increased risk caused by the defendant, and in which, once a plaintiff had presented a *prima facie* case demonstrating that the defendant had caused the environmental risk complained of, the onus would be placed on the defendant to disprove causation of injury to the plaintiff.

Recommendation No. 121

The Committee recommends that:

- a) CEPA be amended to permit citizens to undertake a private prosecution.
- b) CEPA be further amended to provide that if the Attorney General decides to pursue a prosecution initiated by a citizen, the citizen be entitled to

remain a party to the proceedings and, if the Attorney General decides to settle the case out of court, the citizen be entitled to participate in the negotiations and be made a party to the agreement.

Recommendation No. 122

The Committee recommends that:

- a) CEPA require the creation of an environmental fund to be used for a variety of environmental protection activities, including the remediation of environmental emergencies covered under CEPA; the remediation of contaminated sites on federal lands; and the provision of financial assistance to groups and individuals under the proposed participant funding program.
- b) The fund be administered by Environment Canada and financed by the penalties, fines, fees and levies imposed under CEPA, as well as the monetary awards granted under the proposed citizen suit provisions.

Recommendation No. 123

The Committee recommends that CEPA be amended to require the establishment of a participant funding program, including a provision respecting interim funding, that would be funded from the monies in the environmental fund to be established under CEPA.

Recommendation No. 124

The Committee recommends that the Government of Canada develop comprehensive federal legislation respecting the environmental rights of Canadians and Canadian workers.

CHAPTER 15:

Recommendation No. 125

The Committee recommends that:

- a) Environment Canada revise its enforcement approach under CEPA pursuant to the principles of independence, consistency, effectiveness and transparency. Specifically:
 - An independent enforcement office with regional branches be established within Environment Canada, that would report directly to the Minister of the Environment or to the Deputy Minister.
 - The *CEPA Enforcement and Compliance Policy* be revised and updated and procedures be established to ensure that enforcement decisions are made with reference to the updated policy. Training programs for enforcement personnel should also be provided where needed and a summary of all enforcement action should be prepared and made available on a centralized databank.

- Performance objectives be set and methods for evaluating effectiveness be developed to ensure the effectiveness of the Enforcement and Compliance Policy and to determine priorities.
 - Detailed information on enforcement action be provided on the electronic public registry and a separate publication on enforcement action be prepared annually and tabled in Parliament.
- b) The decision to undertake a prosecution be approved by the lawyers assigned to Environment Canada by the Department of Justice. Such decisions need not be approved by other officials within the Justice Department.
- c) All important CEPA offences be assigned to prosecutors with environmental expertise.

Recommendation No. 126

The Committee recommends that the Department of Justice give priority status to the proclamation of the *Contraventions Act* so as to expedite the implementation of the ticketing provisions under section 134 of CEPA.

Recommendation No. 127

The Committee recommends that CEPA be amended to include a system of administrative monetary penalties and a framework for negotiated settlements that would apply to the less serious offences under the Act.

The Committee further recommends that negotiated settlements be permitted only as an alternative to the payment of the prescribed monetary penalty.

Recommendation No. 128

The Committee recommends that the existing power of inspectors to take, or to order, preventive or remedial action in cases of unauthorized releases under sections 36 and 57 be extended to all relevant Parts of CEPA, including any new parts that may be added under the Act.

The Committee further recommends that the related provisions respecting access to property be extended to all relevant Parts of the Act, and that persons against whom a preventive or remedial order is issued be required to report on the measures taken by them to comply with the order.

Recommendation No. 129

The Committee recommends that CEPA be amended to allow the use of “cease and desist” or “stop” orders to prevent or contain any danger or threatened danger to human health or to the environment that has resulted from, or may result from, a violation of the Act or regulations.

The Committee further recommends that Environment Canada, in consultation with the Department of Justice, determine the terms and conditions under which such orders should be used.

Recommendation No. 130

The Committee recommends that:

- a) CEPA be amended to permit inspectors to seek a warrant from a justice of the peace, authorising entry into all premises and places for the purposes of carrying out an inspection.
- b) Provision be made allowing a justice of the peace to authorize the limited use of force in executing the warrant and to prescribe such other terms and conditions as are deemed appropriate.
- c) CEPA be amended to allow warrants to be obtained by means of telecommunication (telephone, facsimile transmission, computer modem, etc.)
- d) CEPA be amended expressly to provide that the term “places” includes platforms anchored at sea, motor vehicles and other conveyances.

Recommendation No. 131

The Committee recommends that CEPA be amended to authorize providing CEPA inspectors with the powers of a peace officer.

Recommendation No. 132

The Committee recommends that official analysts be granted the power to enter premises under section 100(1), and the power to open and examine receptacles and packages, take samples and measurements and conduct tests under section 100(5), and that the necessary consequential amendments be made.

Recommendation No. 133

The Committee recommends that:

- a) Section 130 of CEPA be amended to enable the court to order the recovery of the costs incurred in the investigation and prosecution of offences under the Act.
- b) CEPA be amended to require that the fines and administrative monetary penalties collected in relation to violations of the Act or regulations be placed, in whole or in part, in an environmental fund created under CEPA, and that these monies be used for expanded surveillance, research activities and other administrative duties, including the financing of participant funding.
- c) CEPA be amended to provide for an explicit classification of offences and sentencing guidelines for the court's consideration.

- d) Environment Canada continue to sensitize the judiciary to the gravity of environmental offences and to improve the level of understanding by federal prosecutors as to what issues are important for sentencing in environmental cases.

Recommendation No. 134

The Committee recommends that CEPA be amended to require the court to order that persons convicted of a serious offence publish an account of their conviction under such terms and conditions as the court may prescribe.

The Committee further recommends that Environment Canada issue press releases on violations under the Act or regulations so that they may be publicized by the media.

CHAPTER 16:

Recommendation No. 135

The Committee recommends that the Federal-Provincial Advisory Committee as established under section 6 of CEPA continue as the principal federal-provincial-territorial consultative mechanism for CEPA-related issues.

Recommendation No. 136

The Committee recommends that the Minister of the Environment review the role and mandate of the Federal-Provincial Advisory Committee and seek the participation of Aboriginal peoples on the Committee.

Recommendation No. 137

The Committee recommends that CEPA be amended to provide for:

- a) publication of proposed equivalency and administrative agreements in the *Canada Gazette* Part I and in a public registry;
- b) public consultation with respect to proposed equivalency and administrative agreements;
- c) publication of the final text of administrative and equivalency agreements in the *Canada Gazette* Part II and in a public registry;
- d) detailed annual reporting to Parliament on the administration and enforcement of CEPA regulations and equivalent provincial regulations; and
- e) the insertion of sunset clauses into equivalency and administrative agreements requiring a review of the agreements before the expiration of five years.

The Committee recommends that CEPA be amended to provide that equivalency and administrative agreements be tabled in the House of Commons and reviewed by the

House of Commons Standing Committee on Environment and Sustainable Development or its successor and that such agreements not take effect until endorsed by a resolution of the House of Commons.

The Committee recommends that the federal government retain full authority and accountability under administrative agreements to enforce CEPA.

Recommendation No. 138

The Committee recommends that within 12 months of the tabling of this Report, Environment Canada undertake and complete a public review of the criteria which must be met before equivalency and administrative agreements are signed. The main objective of this review should be to ensure the maintenance of the highest possible standards.

Recommendation No. 139

The Committee recommends that before concluding further administrative agreements with the provinces in respect of the pollution prevention provisions (section 36) of the *Fisheries Act*, the Department of the Environment and the Department of Fisheries and Oceans conduct an in-depth review of the impact of these agreements on the *Canadian Environmental Assessment Act* and other federal legislation.

Recommendation No. 140

The Committee recommends that the *Fisheries Act* be amended to provide for:

- a) authority for the Minister of Fisheries and Oceans and the Minister of the Environment to enter into agreements with the provincial governments with respect to the administration of the pollution prevention provisions of the Act;
- b) publication of proposed administrative agreements with respect to the pollution prevention provisions of the Act in the *Canada Gazette* Part I and in a public registry;
- c) public consultation with respect to the proposed agreements;
- d) publication of the final text of such administrative agreements in the *Canada Gazette* Part II and in a public registry;
- e) detailed annual reporting to Parliament on the administration and enforcement of the *Fisheries Act* and its regulations; and
- f) the insertion of sunset clauses into such administrative agreements requiring a review of the agreements before the expiration of five years.

The Committee recommends that the *Fisheries Act* be amended to provide that administrative agreements with respect to the pollution prevention provisions of the

Act be tabled in the House of Commons and reviewed by a Committee of Parliament and that such agreements not take effect until endorsed by a resolution of the House of Commons.

The Committee further recommends that the federal government retain full authority and accountability under administrative agreements to enforce the pollution prevention provisions of the *Fisheries Act*.

The Committee recommends that within 12 months of the presentation of this Report in the House, Environment Canada and the Department of Fisheries and Oceans undertake and complete a public review to develop criteria that must be met before administrative agreements with respect to the pollution prevention provisions of the *Fisheries Act* are signed.

Recommendation No. 141

The Committee recommends that CEPA be amended to require a comprehensive review of the provisions and operation of the Act every five years by the House of Commons Standing Committee on Environment and Sustainable Development or its successor.

GLOSSARY

ACCEPTABLE CONCENTRATION: in the context of an environmental risk assessment, the maximum substance concentration that causes no immediate or long-term harmful effect to the (natural) population, community or ecosystem under consideration.

AMPs (Administrative Monetary Penalties): AMPs are penalties imposed as a consequence of a person's failure to comply with a statutory or regulatory requirement. They involve the establishment of monetary penalties (i.e., fines) for particular offences or classes of offences, and are an enforcement alternative to the use of criminal sanctions.

ANTHROPOGENIC SUBSTANCE: human-made or manufactured substances, in contrast to those which occur naturally. Some naturally occurring substances are released into the environment in harmful quantities or concentrations by human activities, however.

ARET: the Accelerated Reduction/Elimination of Toxics program, a voluntary private-sector initiative to develop targets and schedules for the reduction or elimination of emissions of specific toxic substances by industry.

BAN/BANNING: the removal from the marketplace over a short time-span of a substance or substances, subsequent to a regulatory action under legislation.

BIOACCUMULATION: bioaccumulation refers to the capacity of a substance to accumulate in the tissues of an organism, possibly reaching toxic levels over time. Such substances are often, but not always, dissolved in fatty tissues. A very similar term is *bioconcentration*.

BIOASSAY: a study carried out using a population of living organisms in a controlled situation to determine the relative toxicity of a substance or mixture of substances. A common example is the use of a population of fish, such as rainbow trout, to determine the relative toxicity of effluent from an industrial plant.

BIOLOGICAL DIVERSITY: the definition adopted by the Committee is that used by the Convention on Biological Diversity — the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, among species and of ecosystems.

BIOMAGNIFICATION: a process whereby the accumulated tissue levels of a substance increase in concentration in organisms at progressively higher stages of a food chain.

BIOTECHNOLOGY: as defined in CEPA, “the application of science and engineering in the direct use of living organisms or parts or products of living organisms in their natural or modified forms”.

CARCINOGENICITY: the capacity of a substance (*carcinogen*), or a process, to cause cancer in an organism.

CCME (Canadian Council of Ministers of the Environment): the CCME is a council of the federal, provincial and territorial ministers of the environment which is intended to foster information exchange and debate, leading to cooperative federal-provincial-territorial initiatives.

CHLORINE: an element that exists as a gas in its natural state. Chlorine occurs naturally in a number of inorganic salts, notably in *sodium chloride* or common table salt. Chlorine also occurs in a great number of organic compounds, most of which are human-made, and some of which are persistent, bioaccumulative and toxic.

CITIZEN SUIT: a civil action or lawsuit undertaken by a member or members of the public against a party whose unlawful actions have caused or are likely to cause harm to the environment. In contrast to traditional civil actions, citizen suits do not require the plaintiff to have suffered personal injury or damage in order to bring the action, since citizen suits are intended to protect the environment and not to compensate victims for their loss.

COASTAL ZONE MANAGEMENT: a dynamic process in which a co-ordinated strategy is developed and implemented for the allocation of environmental, social, cultural and institutional resources to achieve the conservation and sustainable multiple use of the coastal zone.

COUNTRY FOOD: food obtained through traditional means — grown or hunted and killed for domestic consumption.

DIOXIN: a term that refers to a group of organic, chlorinated compounds, some of which are extremely toxic to organisms, including humans. Also known as “polychlorinated dibenzo-p-dioxins” or PCDDs. Dioxins produced by the pulp and paper industry are regulated under CEPA.

DOMESTIC SUBSTANCES LIST (DSL): an inventory of chemicals known to have been in use in Canada between 1984 and 1986. Published in the *Canada Gazette* in 1991, the DSL now contains more than 28,000 substances.

EATS (Enforcement Activities Tracking System) : EATS is a national computerized information system that contains data on the enforcement activities undertaken under CEPA and the pollution prevention provisions of the *Fisheries Act*. Developed by CEPA's national Office of Enforcement, EATS is scheduled to be fully operational by the end of 1995.

ECO-LABELLING: identifying products and services that are environmentally preferable by using labels that inform consumers about the environmental consequences of their purchasing decisions.

ECONOMIC INSTRUMENTS: measures that have the potential to change behaviour by providing monetary incentives to reduce and/or eliminate the creation and discharge of toxic substances.

ECOSYSTEM: the definition adopted by the Committee is that used in the Convention on Biological Diversity — “a dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit”.

ECOSYSTEM APPROACH: administering the Act in a manner that maintains the functional integrity of ecosystems.

EFFECTS ASSESSMENT: part of risk assessment under section 11 of CEPA, this term refers to the determination of acceptable concentrations of a substance for populations, communities and ecosystems and establishes whether the acceptable concentrations are the actual levels of the substance in the environment.

ENTRY ASSESSMENT: part of risk assessment under section 11 of CEPA, this term refers to the process of establishing whether a substance is entering the environment and the quantification of the major sources and releases.

ENVIRONMENTAL EFFECTS MONITORING: measures the environmental impact of emissions as determined by the effect on various ecosystem indicators, such as fish mortality. By contrast, most compliance monitoring systems measure compliance with a prescribed standard — e.g. quantity of pollutants emitted per ton of emissions.

ENVIRONMENTAL EMERGENCY: a crisis that derives from an event that inflicts, or threatens to inflict, damage on the environment.

EPA (Environmental Protection Agency): the lead federal environmental management department in the United States.

ESTROGENIC: refers to effects caused by *estrogen*, or substances that have the capacity to stimulate the development of female sex characteristics. Estrogenic substances can impair the development of male embryos.

EUTROPHICATION: the process of overfertilization of a body of water by nutrients that produce more organic matter than the self-purification processes of the water body can overcome. Eutrophication can be a natural process or it can be accelerated by an increase in nutrient levels in a water body by human activity.

EXPOSURE ASSESSMENT: part of risk assessment under section 11 of CEPA, the term refers to the determination of substance levels in the environment and the properties affecting substance uptake by biota.

EXTENDED PRODUCER RESPONSIBILITY: policies that encourage the reduced use of hazardous materials and the increased recyclability of products by holding producers responsible for the environmental impact of certain products throughout their product life-cycles.

FEDERAL HOUSE: means those federal institutions, undertakings and lands that are subject to the provisions of Part IV of CEPA. Specifically, for the purposes of Part IV, the term “Federal House” means federal departments, boards and agencies, federal works and undertakings, Crown corporations named in Schedule III to the *Financial Administration Act*, federal regulatory bodies and federal lands, including Indian reserves.

FEDERAL ORPHAN SITES: sites on federal lands that were contaminated by a party or parties (other than a federal department or agency) who are unknown or unwilling or unable to carry out the clean-up.

FULL COST ACCOUNTING: the attempt to account for the full impact of an activity in economic terms, including the external environmental costs imposed by the activity.

FURAN: a group of organic, chlorinated compounds, some of which are extremely toxic to organisms, including humans. Also known as “polychlorinated dibenzofurans” or PCDFs. Furans produced by the pulp and paper industry are regulated under CEPA.

HAZARD ASSESSMENT: an assessment of the *intrinsic hazard* or *intrinsic toxicity* of a substance. This assessment does not take into consideration actual exposure to a substance, or quantities of a substance actually released into the environment.

HAZARDOUS SUBSTANCE: a substance that if released from its means of containment in sufficient quantity could result in serious hazard to life, property or the environment.

IJC (International Joint Commission): established by the Boundary Waters Treaty of 1909, it is comprised of three Canadian and three American Commissioners whose mandate is to identify and try to propose solutions for issues affecting boundary waters between Canada and the United States.

INTEGRATED PERMITTING: a strategy to consolidate the multiple environment-related permits from federal, provincial and local governments with which an industrial facility often has to comply.

INTERTIDAL ZONE: the area which is covered at high tide and uncovered at low tide.

MMT: the abbreviation for a manganese-based fuel additive which is used as an octane enhancer in gasoline sold in Canada, but not in the United States. Legislation has been introduced to ban MMT because of its alleged deleterious effects on motor vehicle emission-control systems.

MUTAGENICITY: the capacity of a substance to cause a permanent change in genetic material; such a substance is called a *mutagen*.

NCSRP (National Contaminated Sites Remedial Program): a federal/provincial/territorial program set up in 1989-1990 to clean up high-risk contaminated orphan sites in Canada. Although funding for this five-year program expired in March 1995, Environment Canada has indicated that work will continue to complete projects already under way.

NEW SUBSTANCES: a term generally used for substances that come under CEPA which are new to the Canadian market and do not appear on the Domestic Substances List; that is, they have been introduced since CEPA came into force.

NON-DOMESTIC SUBSTANCES LIST (NDSL): a list of substances not in use in Canada but used elsewhere. Published in 1991, the NDSL includes over 40,000 substances.

NON-POINT SOURCE: source of pollution in which pollutants are discharged over a widespread area or from a number of small inputs rather than from distinct identifiable sources (i.e., point sources).

NPRI (National Pollutant Release Inventory): Canada's first national and publicly-accessible database on the release of selected pollutants into the environment from industrial and transportation sources, it was inaugurated in 1993 under CEPA.

NUTRIENTS: any element or compound that an organism must take in from its environment because it cannot produce it or cannot produce it as fast as it needs it. As pollutants, any element or compound, such as phosphorus or nitrogen, that fuels abnormally high organic growth in aquatic ecosystems.

OCEAN DUMPING: the subject of Part VI of CEPA, "Ocean Dumping" is defined as the deliberate disposal at sea from ships, aircraft, platforms or other anthropogenic structures, including disposal by incineration or other thermal degradation, of any substance, or the disposal of any substance by placing it on pack ice.

OECD (Organization for Economic Cooperation and Development): primarily an economic research and science organization of 25 of the most economically developed countries in the world.

PERSISTENCE: a term used for those substances which do not readily degrade, or break down, in the environment and remain in their original form for long periods. In some cases, the original substance *does* break down but a similarly toxic product of the breakdown (metabolite) persists in the environment.

PEST CONTROL PRODUCT: the legal term for "pesticides", which includes those chemicals and other substances variously used as insecticides, fungicides and herbicides, and for other purposes defined by legislation. These products are regulated

under the *Pest Control Products Act*, administered by Agriculture and Agri-Food Canada, but soon to be transferred to an independent agency under Health Canada. Pest control products are exempted from CEPA.

PESTICIDE: SEE *PEST CONTROL PRODUCT*.

POINT SOURCE: a stationary source whose emissions may contribute significantly to environmental degradation.

POLLUTION PREVENTION: the use of processes, practices, materials, products or energy that avoids or minimizes the generation and use of pollutants and wastes. This should be done without shifting or creating equal or greater risks to human health or the environment.

POLLUTION-PREVENTION PLANNING: in an industrial context, this includes a comprehensive examination of the operations at an industrial plant with the goal of avoiding, eliminating or reducing pollution, and encompasses the successive stages in the life cycle of products.

PRECAUTIONARY PRINCIPLE: in respect of all substances suspected of posing serious threats to the environment or to human health, on the basis of weight of evidence, lack of full scientific certainty shall not be sufficient reason for postponing preventive or remedial measures.

PRIORITY SUBSTANCES LIST: a list of substances established under section 12 of CEPA. Substances included on the PSL are those “of which the Ministers are satisfied priority should be given in assessing whether they are toxic or capable of becoming toxic”.

PROCESS AND PRODUCTION METHODS (PPM) RESTRICTION: a rule restricting or imposing tariffs on the import of a product on the basis of how the product was produced.

PSL1: the first Priority Substances List, which included 44 substances.

PSL2: the second Priority Substances List, which is currently in preparation, and will include approximately, 25 substances.

RADIONUCLIDE: radioactive species of atoms that are products of the natural decay of uranium, including radium-226, thorium-230, lead-210, and polonium-210.

RISK ASSESSMENT: a process required mandated under section 11 of CEPA which determines whether a substance poses an actual risk to the Canadian environment. The three major components of a risk assessment are the *entry*, *exposure*, and *effects*.

SAFETY FACTOR: a numerical factor that is used by toxicologists to account for the differences between humans and experimental animals when determining how much of

a substance is “safe” for humans to be exposed to, and used to calculate a Tolerable Daily Intake or Concentration of the substance (TDI or TDC). A safety factor of 100 is not atypical, but the figure may be higher or lower.

STOP-CLOCK PROVISION: a provision that can be used when an assessment has to be carried out on a substance in a specific period of time and the available information is inadequate for completion of the assessment. The *stop-clock provision* allows the process to be suspended until the needed information is received, at which point the process restarts without any time having been forfeited.

SUSTAINABLE DEVELOPMENT: the definition adopted by the Committee is development that meets the needs of the present without compromising the ability of the “next seven generations” to meet their own needs.

SUNSET/SUNSETTING: an emerging concept which allows a substance or process to be characterized as harmful to human or ecosystem health and scheduled for virtual elimination from the environment over a sufficiently long period of time for substitute substances or processes to be put in place, with minimal disadvantage to society.

TOXICITY: in scientific parlance, toxicity is the inherent capability of a substance to cause harm, which does not take into account exposure. Also sometimes called *inherent or intrinsic toxicity*.

TRI (Toxic Release Inventory): a national, publicly-accessible inventory of selected substances used and released into the environment by designated facilities in the United States. It is the American counterpart to Canada’s National Pollutant Release Inventory (NPRI).

TRITIUM: a radioactive isotope of hydrogen with atoms three times the mass of ordinary hydrogen atoms.

UNCSD (United Nations’ Commission for Sustainable Development): composed of 58 countries chosen to represent all parts of the world and has a broad mandate to monitor the implementation of *Agenda 21*, an action plan signed by most nations at the 1992 United Nations Conference for Sustainable Development.

UNEP (United Nations Environment Program): formed in 1972 to promote international environmental cooperation, to review the world environmental situation, and to report on the development of environmental programs.

USER/PRODUCER RESPONSIBILITY: for all substances suspected of posing a serious threat to the environment or health on the basis of weight of evidence, the onus shall be on the proponent or producer to demonstrate that the substance is safe, rather than on government or concerned citizens to prove that it is harmful.

WEIGHT OF EVIDENCE: for the International Joint Commission, this means taking into account a variety of studies across a range of circumstances and then, if there is a

strong tendency or probability of linkages between the substance(s) and injury, taking action to stop the input of those substances to the environment without waiting for absolute proof that a specific chemical has caused injury to humans.

APPENDIX A

WITNESSES

| Associations and Individuals | Issue | Date |
|---|-------|--------------------|
| Agriculture and Agri-Food Canada J. Brian Morrissey, Assistant Deputy Minister, Research Branch Pierre Corriveau, Director, Facilities Management and Security Services, Corporate Services Branch Ivo Krupka, Executive Secretary, Pest Management Secretariat | 70 | January 30, 1995 |
| Albright & Wilson America Carl W. Carter, Senior Technical Service Representative | 45 | October 17, 1994 |
| Aquatic Ecosystem Health Management Society Diane Malley, Treasurer | 61 | November 29, 1994 |
| Assembly of First Nations Ovide Mercredi, National Chief Keith Coon, Environmental Coordinator | 74 | February 16, 1995 |
| Atomic Energy of Canada Ltd. Reid Morden, President and Chief Executive Officer William T. Hancox, Vice-President, Technology and Planning | 71 | January 31, 1995 |
| Baffin Chamber of Commerce Derek Rasmussen | 80 | May 9, 1995 |
| Baffin Regional Inuit Association Malachi Arreak, Chiefs Lands and Resources Officer | 80 | May 9, 1995 |
| Bruce, Jim , Consultant (former Assistant Deputy Minister, Environment Canada Climatology) | 78 | April 6, 1995 |
| Brunswick Mining and Smelting Corporation Leonard Surges, Director, Environment | 40 | September 28, 1994 |
| Canada Ports Corporation Jean Michel Tessier, President and Chief Executive Officer Hassan J. Ansary, Executive Vice-President | 71 | January 31, 1995 |
| Canadian Bar Association Joan Bercovitch, Lawyer, Senior Director, Legal and Governmental Affairs Roger Harris, Lawyer, Chair, Eastern Environmental Law Section Darlene Pearson, Lawyer, Chair, National Environmental Law Section | 69 | December 15, 1994 |

| Associations and Individuals | Issue | Date |
|--|-------|--------------------|
| Canadian Chamber of Commerce | 39 | September 27, 1994 |
| Sharon Glover, Senior Vice-President, Government Relations and Policy | | |
| Thomas Gove, Chairman, Environment Committee | | |
| Dyna Winn, Associate Product Development, Manager Regulatory Affairs, Laundry and Cleaning Product | | |
| Canadian Chemical Producers' Association | | |
| David W. Goffin, Secretary-Treasurer | 43 | October 5, 1994 |
| Geoffrey C. Granville, Manager, Toxicology and Materials Safety, Shell Canada Ltd. | 43 | October 5, 1994 |
| Claude-André Lachance, Government Affairs and Issues Management, Dow Chemical | 43 | October 5, 1994 |
| Gordon Lloyd, Vice-President, Technical Affairs | 43 | October 5, 1994 |
| | 80 | May 3, 1995 |
| John M. Shepard, Corporate Vice-President, NACAN | 43 | October 5, 1994 |
| Canadian Electrical Association | 66 | December 8, 1994 |
| Hans Konow, President and CEO | | |
| Gilles Bérubé, Lawyer, Adviser to the Vice-President of Environment, Hydro-Quebec | | |
| Jim Burpee, General Manager, Fossil, Ontario Hydro | | |
| Canadian Energy Pipeline Association | 43 | October 5, 1994 |
| Robert Falls, Chairman, Sustainable Development Council | | |
| Robert A. Hill, Vice-President, Technology & Operations | | |
| Canadian Environmental Industries Association | | |
| Steve Hart, President | 36 | June 16, 1994 |
| | 44 | October 6, 1994 |
| Robert Redhead, Director | 44 | October 6, 1994 |
| Canadian Environmental Industries Association (Ontario) | 80 | May 3, 1995 |
| Garry T. Gallon, President | | |
| Canadian Environmental Law Association | | |
| Paul Muldoon, Legal Counsel | 35 | June 15, 1994 |
| | 44 | October 6, 1994 |
| Canadian Environmental Network | 35 | June 15, 1994 |
| Craig Boljkouac, Caucus Consultation Coordinator | | |
| Canadian Federation of Agriculture | 53 | November 1, 1994 |
| Vahid Aidun, Resource Analyst | | |
| Sheila Forsyth, National Agriculture Environment Secretariat | | |

| Associations and Individuals | Issue | Date |
|--|----------------|---|
| Canadian Heritage Thomas Lee, Assistant Deputy Minister, Parks Canada Christine Cameron, Director General, National Historic Sites Mike Porter, Acting Director General National Parks | 71 | January 31, 1995 |
| Canadian Institute for Environmental Law and Policy Ann Mitchell, Executive Director Mark Winfield, Director of Research | 39 | September 27, 1994 |
| Canadian Institute of Public Health Inspectors Charles L. Young, Immediate Past National President | 64 | December 2, 1994 |
| Canadian Labour Congress David Bennett, Director, National Environment Representative Nancy Riche, Executive Vice-President | 37 42 42 | June 21, 1994 October 4, 1994 October 4, 1994 |
| Canadian Manufacturers' of Chemicals Specialities David Halton, President George Newbery, Chairman of the Board | 45 | October 17, 1994 |
| Canadian Nuclear Association Tim Meadley, First President and President, Uranium Saskatchewan John M. Reid, President Ian Wilson, Vice-President and General Manager | 66 | December 8, 1994 |
| Canadian Petroleum Products Institute Brendan Hawley, Director, Public Affairs | 36 43 | June 16, 1994 October 5, 1994 |
| Canadian Polar Commission Whit Fraser, Chairman Eva Arreak, Member of the Board of Directors | 80 | May 9, 1995 |
| Canadian Printing Industry Association Keith Jackson, President Benoît Brasseur, Environmental Director of Québecor Ltd. John Crick, Environmental Director of Canadian Fine Color Ltd. John Piggott, Chair, Environment Committee | 45 | October 17, 1994 |
| Canadian Public Health Association Robert Burr, Director, Public Affairs and Communications Fred Ruf, Member, Ad Hoc Committee of the Occupational and Environmental Health Division Kathryn Tregunna, Senior Program Officer, National Programs | 58 | November 16, 1994 |

| Associations and Individuals | Issue | Date |
|---|-------|-------------------|
| Canadian Pulp and Paper Association | 67 | December 13, 1994 |
| David Barron, Vice-President, Environment, Research & Technology | | |
| John Roberts, Vice-President, Environment, Noranda Forest Recycled Papers | | |
| Centre for Indigenous Environmental Resources | | |
| Eli Mandamin, Chief, Iskatewizaagegan Independent First Nations | 61 | November 29, 1994 |
| Merrell-Ann Phare, Legal Counsel and Policy Advisor | 61 | November 29, 1994 |
| | 73 | February 15, 1995 |
| Kim Wong, Ecologist | 61 | November 29, 1994 |
| Phil Fontaine, Grand Chief, Assembly of Manitoba Chiefs | 73 | February 15, 1995 |
| National Co-Chair, CIER | | |
| Laurie Montour, Ecosystem Biologist | 50 | October 20, 1994 |
| | 73 | February 15, 1995 |
| <i>Centre patronal de l'environnement du Québec</i> | 48 | October 19, 1994 |
| Michael Cloghesy, President | | |
| <i>Centre québécois du droit de l'environnement and l'Union québécoise pour la conservation de la nature</i> | 37 | June 21, 1994 |
| Yves Corriveau, Director | | |
| <i>Centre québécois du droit de l'environnement</i> | 42 | October 4, 1994 |
| Franklin Gertler, Vice-President | | |
| CEPAWARE Inc. | 45 | October 17, 1994 |
| Mark T. Goldberg, Principal | | |
| Chiefs of Ontario | 72 | February 14, 1995 |
| Gordon Peters, Ontario Regional Chief | | |
| Michael Sherry, Legal Counsel | | |
| Circumpolar Institute of Environmental Law | 64 | December 2, 1994 |
| Lynda Duncan, Executive Director | | |
| Clean Nova Scotia | 55 | November 7, 1994 |
| Martin Janowitz, Executive Director | | |
| Dalhousie University, Faculty of Law | 55 | November 7, 1994 |
| David VanderZwaag, Associate Professor of Law | | |
| Dalhousie University, School for Resource and Environmental Studies | 55 | November 7, 1994 |
| Raymond Côté, Director | | |

| Associations and Individuals | Issue | Date |
|---|-------|-------------------|
| Dene Nation | 80 | May 11, 1995 |
| Chief Gerry Antoine, Grand Chief of the Deh Cho First Nation | | |
| Isadore Tsetta, Elders Advisory Council | | |
| Michel Paper, Elders Advisory Council | | |
| Fred Sangris, Coordinator, Yellowknives Land Environment Committee | | |
| Carole Mills, Environment Manager | | |
| Department of Foreign Affairs and International Trade | 75 | February 28, 1995 |
| Richard Ballhorn, Director, Environment Division | | |
| Ross Glasgow, Deputy Director, Environment Division | | |
| Department of Indian Affairs and Northern Development | 71 | January 31, 1995 |
| Wendy Porteous, Assistant Deputy Minister, Lands and Trusts Services | | |
| Hiram Beaubier, Director General, Natural Resources and Environment Branch | | |
| John Graham, Director General, Lands and Environment Branch | | |
| Department of Justice Canada | 70 | January 30, 1995 |
| William H. Corbett, Senior General Counsel, Criminal Law Section | | |
| Ellen Fry, General Counsel, Environment Legal Services | | |
| Dogrib Treaty 11 Council | 80 | May 11, 1995 |
| Violet Camsell-Blondin, Renewable Resources Coordinator | | |
| Joe Migwi, Elder and Former Chief | | |
| Ecology North | 80 | May 11, 1995 |
| Chris O'Brien, Director | | |
| Energy Probe Research Foundation | 45 | October 17, 1994 |
| Norman Rubin, Director, Nuclear Research and Senior Policy Analyst | | |
| Environment Canada | | |
| Mel Cappe, Deputy Minister | 34 | June 14, 1994 |
| | 54 | November 2, 1994 |
| | 70 | January 30, 1995 |
| Glenn Allard, Director General, Technology Development Environmental Protection Service | 34 | June 14, 1994 |
| Garth Bangay, Director General, Ecosystem Conservation Environmental Conservation Service | 34 | June 14, 1994 |
| Anthony Clarke, Assistant Deputy Minister, Environmental Protection Service | 34 | June 14, 1994 |
| | 70 | January 30, 1995 |
| Janet Davies, Director General, Environmental Citizenship | 34 | June 14, 1994 |

| Associations and Individuals | Issue | Date |
|---|-------|------------------|
| Jean-Pierre Gauthier, Regional Director, Quebec Region | 34 | June 14, 1994 |
| | 48 | October 19, 1994 |
| François Guimont, Director General, Pollution Prevention Environmental Protection Service | 34 | June 14, 1994 |
| Gisèle Jacob, Director General, Program Integration Environmental Protection Service | 34 | June 14, 1994 |
| François Lavallée, Director, National Pollution Release Inventory | 34 | June 14, 1994 |
| Paul Cuillierier, Director, Office of Enforcement | 34 | June 14, 1994 |
| Dave Egar, Director General, National Programs Environmental Protection Service | 34 | June 14, 1994 |
| Ellen Fry, General Counsel, Legal Services | 34 | June 14, 1994 |
| | 70 | January 30, 1995 |
| Dave Hay, Chief, Solid Waste Division, Environmental Protection Service | 34 | June 14, 1994 |
| Doug Russell, Director, Air Issues Branch, Pollution Prevention Directorate | 34 | June 14, 1994 |
| Martin Boddington, Departmental Liaison Officer | 44 | October 6, 1994 |
| James Riordan, Director, National Office of Pollution Prevention | 80 | May 3, 1995 |
| Anthony Stone, Manager, ARET Strategies | 80 | May 3, 1995 |
| Environment Canada (Atlantic Region) | | |
| Karen Brown, Regional Director General, Atlantic Region | 55 | November 7, 1994 |
| David Aggett, Chief, Enforcement Section, Environmental Protection Branch | | |
| Bill Ernst, Acting Head, Toxic Chemicals & Waste Management Section, Environmental Protection Branch | 55 | November 7, 1994 |
| Michael Guilcher, Manager, Pollution Reduction Division | 55 | November 7, 1994 |
| Ken Hamilton, Director, Environmental Protection Branch | 55 | November 7, 1994 |
| Roger Percy, Head, Environmental Emergencies Section Environmental Protection Branch | 55 | November 7, 1994 |
| Ian Travers, Nova Scotia Provincial Manager | 55 | November 7, 1994 |
| Janice Cochrane, Assistant Deputy Minister | 70 | January 30, 1995 |
| Environment Canada (Ontario Region) | 47 | October 18, 1994 |
| Janette Anderson, Issues Coordinator, Restoration Programs Division | | |
| R. Krauel, Head, Commercial Chemicals, Contaminants Nuclear and Waste Division | | |
| P. Levedag, Head, Inspection & Technical Services Emergencies and Enforcement Division | | |
| Simon Llewellyn, Director, Environment Conservation Board | | |
| R. John Mills, Regional Director General | | |
| D.J. Pascoe, Manager, Emergencies and Enforcement Division | | |
| T. Tseng, Senior Advisor, Pollution Prevention and Abatement Division | | |

| Associations and Individuals | Issue | Date |
|--|-------|-------------------|
| Environment Canada (Pacific and Yukon Region) | 63 | December 1, 1994 |
| Earl Anthony, Regional Director General, Pacific and Yukon Region | | |
| Vic Niemela, Regional Director, Environmental Protection Branch | | |
| Gordon Thompson, Head, Investigations Section, Enforcement and Emergencies Division, Environmental Protection Branch | | |
| Colin Wykes, Manager, Enforcement and Emergencies Division, Environmental Protection Branch | | |
| Environment Canada (Prairie and Northern Region) | | |
| G.W. (Bill) Howard, Director, Environmental Protection Branch | 62 | November 30, 1994 |
| Laura Johnston, Chief, NWT Division, Environmental Protection Branch | 62 | November 30, 1994 |
| | 80 | May 11, 1995 |
| Gordon Manners, Manager, Alberta Division, Environmental Protection Branch | 62 | November 30, 1994 |
| Rob Patzer, Regional Coordinator, Compliance and Enforcement | 62 | November 30, 1994 |
| Jim Vollmershausen, Regional Director General | 62 | November 30, 1994 |
| Todd Burlingame, Environmental Assessment Coordinator | 80 | May 11, 1995 |
| Ed Collins, Head of Environmental Engineering | 80 | May 11, 1995 |
| Environment Canada (Quebec Region) | 48 | October 19, 1994 |
| Jean Cinq-Mars, Regional Director, Environmental Protection Branch | | |
| Gaëtan Duchesneau, Acting Manager, Technology and Intervention SLV 2000 | | |
| Alain Bernier, Head, Analysis and Management Section Corporate Affairs Directorate | | |
| Marie-France Bérard, Head, Air and Toxics, Environmental Protection Directorate | | |
| Lucien Martel, Manager, Enforcement and Emergencies | | |
| Guy Martin, Inspector, CEPA | | |
| Robert Lambert, Inspector, Inspection and Investigation | | |
| Gilles Berthiaume, Inspector, PCBs | | |
| Environmental Law Centre (Alberta) Society | 62 | November 30, 1994 |
| Jenny Scott, Research Assistant | | |
| Environmental Resource Centre | 62 | November 30, 1994 |
| Brian Staszewski | | |
| Federation of Canadian Municipalities | 68 | December 14, 1994 |
| Laurence Mawhinney, President, Mayor, Lunenburg Nova Scotia | | |
| Charlene Lambert, Senior Policy Adviser | | |
| Roger Mareschal, Adviser | | |
| Michael Roche, Director, Department of Policy and Programs | | |

| Associations and Individuals | Issue | Date |
|--|----------------------------|--|
| Fisheries and Oceans L.S. Parsons, Assistant Deputy Minister, Sciences Gerry Swanson, Acting Director General, Marine Environment and Habitat | 70 | January 30, 1995 |
| Friends of the Earth Susan Tanner, Executive Director | 37 | June 21, 1994 |
| Goldcorp Inc. David McHaina, Director of Environmental Services | 45 | October 17, 1994 |
| Government of Manitoba Robert D. Sopuck, Executive Director, Executive Council Sustainable Development Coordination Unit | 61 | November 29, 1994 |
| Government of Northwest Territories Honourable Silas Arngna'naaq, Minister of Renewable Resources Emery Paquin, Director, Environmental Protection Division | 80 | May 11, 1995 |
| Grand Council of the Crees Kenny Blacksmith, Vice Grand Chief Brian Craik, Director of Federal Relations Robert Mainville, Attorney, Robert Mainville and Associates Bill Namagoose, Executive Director | 57 | November 15, 1994 |
| Great Lakes Pollution Prevention Centre Stewart Forbes, Executive Director | 41 | September 29, 1994 |
| Greenpeace Canada Catherine Stewart, Fisheries Campaigner | 64 | December 2, 1994 |
| Gwich'in Renewable Resources Board Robert Charlie, Chair Peter Clarkson, Executive Director Wynet Smith, Policy and Management Analyst | 80 | May 11, 1995 |
| Hamlet of Cambridge Bay Keith Peterson, Deputy Mayor | * | May 12, 1995 |
| Health Canada Kent Foster, Assistant Deputy Minister, Health Protection Branch Ivo Krupka, Executive Secretary, Pest Management Secretariat Peter Toft, Director, Bureau of Chemical Hazards, Health Protection Branch Roy Hickman, Director General, Environmental Health Directorate | 34 70 70 70 34 | June 14, 1994 January 30, 1995 January 30, 1995 January 30, 1995 June 14, 1994 |
| Horse Lake Band of Alberta James D. Coker, Technical Advisor | 62 | November 30, 1994 |

| Associations and Individuals | Issue | Date |
|---|----------------------------|---|
| INCO Limited W. Charles Ferguson, Vice-President, Environment, Health and Safety Thomas C. Burnett, Director, Government Affairs Richard J. Hilton, Manager, Occupational & Environmental Health | 40 | September 28, 1994 |
| Industrial Biotechnology Association of Canada Roger Perrault, President David Gannon, Advisor and Manager, Zeneca Bio Products J.R. Wearing, Chairman of the Board | 65 | December 6, 1994 |
| International Council of Metals and the Environment Gordon Drake, Executive Director, Environmental Affairs Bob Muth, Vice-President, ASARCO Inc., New York Gary Nash, Secretary General | 52 | October 26, 1994 |
| International Institute for Sustainable Development Arthur Hanson, President and Chief Executive Officer | 61 | November 29, 1994 |
| International Joint Commission Claude Lanthier, Chairman, Canadian Section Philip Slyfield, Secretary and Senior Policy Adviser Geoffrey Thornburn, Economics Adviser Michael Vechsler, Legal Adviser | 59 | November 22, 1994 |
| Inuit Tapirisat of Canada Chesley Andersen, Former Vice-President Jamie Kneen, Environment Researcher Peter Usher, Research Director Angela Stadel, Environment Researcher Peter Williamson, Presenter | 37 37 80 80 80 | June 21, 1994 June 21, 1994 May 3, 1995 May 3, 1995 May 3, 1995 |
| Inuvialuit Game Council Duane Smith, Vice-Chair Herbert Felix, Director (Tuktoyaktuk) Tom Beck, Chair, Environmental Impact Screening Committee Norman Snow, Executive Director, Joint Secretariat, Inuvialuit Renewable Resources Committee | 80 | May 11, 1995 |
| Kitikmeot Health Board Robert Phillips, Senior, Environmental Health Officer | * | May 12, 1995 |

| Associations and Individuals | Issue | Date |
|--|-------|--------------------|
| Kitikmeot Inuit Association Clara O'Corman, Board Director Jim Cunningham, Manager, Lands Management | * | May 12, 1995 |
| KPMG Environmental Services Inc. Ann Davis, Partner | 76 | March 1, 1995 |
| <i>La Société pour vaincre la pollution</i> Daniel Green, Director | 48 | October 19, 1994 |
| Lambton Industrial Society Scott Munro, General Manager | 45 | October 17, 1994 |
| Learning Disabilities Association of Canada Barbara McElgunn, Liaison Health Officer | 45 | October 17, 1994 |
| Lesser Slave Lake Indian Reserve Council Jim Badger, Chief | 62 | November 30, 1994 |
| Levine, Levene and Tadman Law Firm Brian Pannell, Lawyer | 61 | November 29, 1994 |
| Major Industrial Accidents Council of Canada Mark Egner, Managing Director, Alberta Public Safety Services Geoffrey Granville, Manager, Toxicology and Materials Safety Shell Canada Ltd. Eric Newell, Chairman, President and CEO, Syncrude Canada Ltd. Michael Salib, Executive Director | 62 | November 30, 1994 |
| Manitoba Environmental Council Derrick Muir, Member | 61 | November 29, 1994 |
| McMaster University Jack Vallentyne, Professor, Department of Civil Engineering | 64 | December 2, 1994 |
| Metis Nation Northwest Territories Gary Bohnet, President Mike Paulette, Vice-President William Carpenter, Environmental Director | 80 | May 11, 1995 |
| Mining Association of Canada George Miller, President | 40 | September 28, 1994 |
| Justyna Laurie-Lean, Vice-President, Environment Health | 36 | June 16, 1994 |
| | 40 | September 28, 1994 |
| Hennie Veldhuizen, Vice-President, Environment Services | 40 | September 28, 1994 |

| Associations and Individuals | Issue | Date |
|---|-------|--------------------|
| Mohawk Council of Akwesasne | | |
| David Arquette, Task Force on the Environment | 50 | October 20, 1994 |
| Lloyd Benedict, Political History of Akwesasne | 50 | October 20, 1994 |
| Sally Benedict, Historian | 50 | October 20, 1994 |
| Henry Lickers, Environment Director | 50 | October 20, 1994 |
| Lynn Roundpoint, Chief, Environment Portfolio | 50 | October 20, 1994 |
| Motor Vehicle Manufacturers' Association | 40 | September 28, 1994 |
| Mark A. Nantais, President | | |
| Paul Hanson, Manager, Environmental Affairs, Facility Engineering, Chrysler Canada Ltd. | | |
| Barry Bowker, Manager, Vehicle Safety and Emissions, Ford Motor Company of Canada Ltd. | | |
| Roger Thomas, Manager, Automotive Regulatory Affairs, General Motors of Canada Ltd. | | |
| Municipality of Iqaluit | 80 | May 9, 1995 |
| Joe Adla Kunuk, Mayor of Iqaluit | | |
| National Defence | 71 | January 31, 1995 |
| John L. Adams, Assistant Deputy Minister, Infrastructure and Environment | | |
| Anthony T. Downs, Director General, Environment | | |
| National Standards System of Canada | 51 | October 25, 1995 |
| <i>Bureau de normalisation du Québec</i> | | |
| Michel Hains, Head of Standardization | | |
| Canadian Gas Association | | |
| Victor Sztainbok, Vice-President | | |
| Canadian Standards Association | | |
| Jim McCarthy, Vice-President, Standards Development | | |
| John Wolfe, Director, Environmental Programs | | |
| Standards Council of Canada | | |
| Michael McSweeney, Executive Director and Chief Executive Officer | | |
| Underwriters' Laboratories of Canada | | |
| Peter Higginston, President | | |
| Natural Resources Canada | 71 | January 31, 1995 |
| William McCann, A/Assistant Deputy Minister, Mining Sector | | |
| Gary Anka, Senior Program Analyst, Environment Affairs Technology Development and Commercialization Division, Canada Forest Service | | |
| Murray Duke, Director, Mineral Resources Division Geological Survey of Canada | | |

| Associations and Individuals | Issue | Date |
|--|-------|--------------------|
| Greg McGuire, Director, Office of Environmental Affairs | | |
| Nunavut Implementation Commission | 80 | May 9, 1995 |
| Jack Hicks, Director of Research | | |
| Nunavut Tunnagavik Inc. | | |
| Jose H. Kusugak, President | 80 | May 9, 1995 |
| James Eetoolook, First Vice-President | * | May 12, 1995 |
| Edna Elias, Executive Assistant to First Vice-President | * | May 12, 1995 |
| Nunavut Wildlife Management Board | 80 | May 9, 1995 |
| Ben Kovic, Chairman | | |
| Ontario Federation of Labour | 45 | October 17, 1994 |
| Duncan McDonald, Programs Coordinator | | |
| Ontario Toxic Waste Research Coalition | 41 | September 29, 1994 |
| John Jackson, Director | | |
| Pollution Probe Foundation | | |
| Fe de Leon, Researcher | 37 | June 21, 1994 |
| Ellen Schwartzel, Air Program Manager | 44 | October 6, 1994 |
| Public Works and Government Services Canada | 71 | January 31, 1995 |
| Reg Evans, Assistant Deputy Minister, Real Property Branch | | |
| Richard Neville, Assistant Deputy Minister, Corporate Services | | |
| Prince Edward Island Environmental Network | 55 | November 7, 1994 |
| Irene Novaczek, Chair, Canadian Ocean Council | | |
| Resource Futures International | | |
| François Bregha, Principal | 35 | June 15, 1994 |
| | 38 | September 20, 1994 |
| John Moffet, Principal | 35 | June 15, 1994 |
| | 38 | September 20, 1994 |
| Saskatchewan Environmental Society | 61 | November 29, 1994 |
| Stephanie Fortugno, Representative | | |
| Science Institute of the Northwest Territories | 80 | May 9, 1995 |
| Bruce Rigby, Executive Director | | |
| Seaspan International Ltd. | | |
| Bruce D. Tennant, Manager, Risk and Environment | 64 | December 2, 1994 |
| Soap and Detergent Association of Canada | 52 | October 26, 1994 |
| Dana Winn, Technical Committee Chairman | | |

| Associations and Individuals | Issue | Date |
|--|-------|--------------------|
| STOP Bruce Walker, Director of Research | 48 | October 19, 1994 |
| Thompson, Dorfman, Sweatman, Barristers and Solicitors Alan W. Scarth, Lawyer, Chair, Fort Whyte Environmental Centre | 61 | November 29, 1994 |
| Toronto Public Health Department Jeanne Jabanoski, Coordinator, Environmental Education | 45 | October 17, 1994 |
| Toxics Watch Society of Alberta Verona Goodwin, Associate Director Myles Kitagawa, Associate Director | 62 | November 30, 1994 |
| Transport Canada Dave Bell, Assistant Deputy Minister, Review Group Victor Thom, Director Environmental Services, Airports Group Chris Wilson, Director General, Road Safety and Motor Vehicle Regulations | 70 | January 30, 1995 |
| United Fisherman Allied Workers Richard Tarnoff, Chair, Environmental Committee | 63 | December 1, 1994 |
| United States Environmental Protection Agency Karen Levy, Senior Policy Analyst | 39 | September 27, 1994 |
| University College of Cape Breton Edwin MacLellan, Associate Professor, Engineering | 55 | November 7, 1994 |
| University of Alberta David W. Schindler, Professor of Ecology, Department of Zoology | 62 | November 30, 1994 |
| University of Guelph Keith Solomon, Director, Centre for Toxicology | 51 | October 25, 1994 |
| University of Manitoba Thomas Henley, Associate Director and Associate Professor, Natural Resources Institute | 61 | November 29, 1994 |
| Vancouver Port Corporation John Jordan, Director of Environment | 64 | December 2, 1994 |
| Vélo Québec Robert Boivin | 48 | October 19, 1994 |
| West Coast Environmental Law Association William Andrews, Executive Director | 64 | December 2, 1994 |
| White, Ottenheimer & Baker Law Firm John Pratt, Associate Lawyer | 55 | November 7, 1994 |

| Associations and Individuals | Issue | Date |
|---|-------|------------------|
| World Wildlife Fund | 45 | October 17, 1994 |
| Julia Langer, Manager of Wildlife Toxicology Program | | |
| Barbara Rutherford, Toxics Coordinator | | |
| Yukon Council of Indians | 80 | May 11, 1995 |
| Patrick James, Chief Carcross/Tagish First Nation | | |
| Norma Kassi, Former MLA from Vuntut, Arctic Environmental Strategy Coordinator | | |
| Lucy Van Oldenbarneveld, Research Assistant | | |

* Unofficial meeting

Canadian Environmental Law Association

Paul Muldoon, Legal Counsel

**Canadian Institute for Environmental Law and Policy
and the Canadian Environmental Network (CEN)
Toxics Caucus**

Burkhard Mausberg, Project Officer

Ontario Toxic Waste Research Coalition

John Jackson, Director

Pollution Probe Foundation

Ellen Schwartzel, Air Program Manager

Safe Sewage

Karey Shinn, Co-Chair of the Safe Sewage Committee

Toronto Environmental Alliance

Lois Corbett

University of Toronto

Henry Regier, Professor of Ecology

Canadian Pulp and Paper Association

Louis Désilets, Coordinator, *Association des industries forestières du Québec*

Centre québécois du droit de l'environnement

Michel Bélanger, President

DESSAU Environment

Marie-Claude Bergevin, President

La Société pour vaincre la pollution

Daniel Green, Director

Martineau, Walker Law Firm

André Durocher, Lawyer

McGill University

Stuart Hill, Professor, Natural Resources Sciences, Director
Ecological Agricultural Projects

Ogilvy-Renault Law Firm

Jean Piette, Lawyer

St. Lawrence National Institute of Eco Toxicology

Pierre Béland, Science Director

Université du Québec à Montréal

Jean-François Léonard, Director, *Institut des sciences de l'environnement*

Canada Cement Lafarge

Grant Langford

**Dalhousie University, School for Resource and
Environmental Studies**

Raymond Côté, Director

Environment Canada (Atlantic Region)

Karen Brown, Regional Director General, Atlantic Region

Lane Environmental Ltd.

Patricia Lane, President

Medical Society of Nova Scotia

Robert Van Dine, Health Policy Officer

Nova Scotia Ecology Action Centre

Gwenda Wells, Policy Director

Nova Scotia Power Corp

Osmando Betancourt, Director, Environmental Policy Programs

Prince Edward Island Environmental Network

Irene Novaczek, Chair, Canadian Ocean Council

Stewart McKelvey, Sterling Scales Law Firm

Meinhard Doelle, Lawyer

Circumpolar Institute of Environmental Law

Lynda Duncan

Council of Forest Industries of British Columbia

Brian McCloy, Vice-President, Environment and Energy

Environment Canada (Pacific and Yukon Region)

Earl Anthony, Regional Director General, Pacific and Yukon
Region

Ferguson & Gifford Law Firm

Andrew Thompson, Lawyer

Reach for Unbleach

Delores Broten

Seaspan International Ltd.

Bruce D. Tennant, Manager, Risk and Environment

**University of British Columbia, School of Community
and Regional Planning**

William Rees, Director

Vancouver Port Corporation

John Jordan, Director of Environment

West Coast Environmental Law Association

Ann Hillyer, Lawyer

Canadian Environmental Law Association

Paul Muldoon, Legal Counsel

Canadian Pulp and Paper Association

David Barron, Vice-President, Environment, Research &
Technology

Mohawk Council of Akwesasne

Henry Lickers, Environment Director

**National Round Table on the Economy and the
Environment**

Ron Doering, Executive Director

Shell Canada Ltd.

Geoffrey Granville, Manager, Toxicology and Materials Safety

St. Lawrence National Institute of Eco Toxicology

Pierre Béland, Science Director

University of Guelph

David Rapport, Chair, Ecosystem Health, Faculty of
Environmental Sciences

University of Toronto

Henry Regier, Professor of Ecology

APPENDIX B

BRIEFS¹

Association of Professional Engineers of Nova Scotia

Baker, Dennis

Bell, Ben

Canada Colors and Chemicals Ltd.

Canadian Fabricare Association

Canadian Institute of Resources Law

Chem-Security (Alberta) Ltd.

Conservation Council of Ontario

Democracy Watch

Dow Chemical Canada Inc.

Dromisky, Stan (M.P.)

Ekaluktukia Hunters and Trappers Association*

F.T. Gerson Limited

Feultault, Robert

Finn, Kim

Fisheries Council of Canada

Government of Saskatchewan, Hon. Bernhard H. Weins, Minister of Environment and Resource Management

Greenpeace Chlorine Free Campaign

Ground Water Alert

Hamlet of Cambridge Bay*

Hewitt, Stephen J.

¹ Briefs submitted by individual/association/groups who did not appear

* Briefs submitted at a non-official meeting in Cambridge Bay, N.W.T.

Hydro-Québec

Janakiraman, Raman, C.S.J. Consulting

Kitikmeot Health Board*

Kitikmeot Inuit Association*

Meakin Consultants

National Action Committee on the Status of Women

National Compost Standards

Native Ecology Economic Development Association

Nunavut Tunngavik Inc. (Cambridge Bay)*

Packaging Association of Canada

Purohet, Monahar R.

Risken Scientific

Saner, Marc

Tate, Donald and Muir, Tom

Tonolli Canada Ltd.

TransAlta Corporation

University of British Columbia, Sustainable Development Research Institute

Winnipeg Chamber of Commerce

POSITION PAPERS SUBMITTED BY THE CANADIAN ENVIRONMENTAL NETWORK TOXICS CAUCUS

Prepared by CEN Toxics Caucus and submitted on behalf of 53 non-governmental groups

- The Canadian Environmental Protection Act: An Agenda for Reform
(a summary of the following position papers)

Prepared by the Canadian Institute for Environmental Law and Policy

- The Constitution, Federal-Provincial Relations, Harmonization and CEPA;
- CEPA and Environmental Law and Policy;
- CEPA and Economic Instruments;
- CEPA, Chemical New Substances, and Biotechnology; and
- CEPA and the Federal House in Order

Prepared by the West Coast Environmental Law Association

- Ensuring Meaningful Public and Worker Involvement in Environmental Protection under CEPA;
- Ocean Dumping; and
- CEPA and Emergency Planning

Prepared by the Canadian Environmental Law Association

- Incorporating Pollution Prevention Into Part II of CEPA: An Agenda For Reform

Prepared by the Conservation Council of New Brunswick

- Coastal Zone Management: Issues for the Five-Year Review of CEPA

Prepared by the Environmental Law Centre (Alberta) Society

- Biodiversity and the Ecosystem Approach: Issues for the Five Year Review of the Canadian Environmental Protection Act

Prepared by the Ontario Toxic Waste Research Coalition

- Canadian Environmental Protection Act Review: Transboundary Waste Movement Provisions

Prepared by Pollution Probe

- Air Quality Issues and the Review of CEPA

ELABORATION PAPERS PREPARED BY ENVIRONMENT CANADA:

- Sustainable Development in Canada
- Biodiversity
- The Ecosystem Approach
- Coastal Zone Management in Canada
- The “Federal House” in Order
- Environmental Protection on Indian Lands
- Pollution Prevention
- Economic Instruments
- Community Right to Know
- Public Participation for Environmental Protection
- Environmental Emergencies
- Negotiated Settlements: An Enforcement Option
- Administrative Monetary Penalties: Their Potential Use in CEPA
- Inspectors Powers and Provisions Governing Official Analysts in the *Canadian Environmental Protection Act* (CEPA)
- Guidance Document on the Options Evaluation Process
- Federal Intergovernmental Co-operation on Environmental Management: A Comparison of Developments in Australia and Canada
- CEPA and the Precautionary Principle/Approach
- The Globalization of Environmental Protection and National Accountability

APPENDIX C

SITE VISIT

TORONTO, ONTARIO, OCTOBER 18, 1994

- Department of National Defence, PCB's storage site
- Non-chemical dry cleaning plant, "Green Clean"

MONTREAL, QUEBEC, OCTOBER 19, 1994

- Montreal Harbour – Industrial sites, St. Lawrence River

AKWESASNE, ONTARIO, OCTOBER 20, 1994

- St. Lawrence River – Polluted areas

FORT SASKATCHEWAN, ALBERTA, NOVEMBER 30, 1994

- Dow Chemical Complex

VANCOUVER, BRITISH COLUMBIA, DECEMBER 2, 1994

- Advances Houses Program

HOWE SOUND, BRITISH COLUMBIA, DECEMBER 3, 1994

- Howe Sound Pulp and Paper Limited — Port Mellon Facilities

IQALUIT, N.W.T., MAY 9, 1995

- Tour of community and local waste disposal sites

YELLOWKNIFE, N.W.T., MAY 1995

- St. Patrick High School (environmentally designed school)

CAMBRIDGE BAY, N.W.T., MAY 13, 1995

- Cam M. site
- Waste disposal sites

REQUEST FOR GOVERNMENT RESPONSE

The Committee pursuant that the Government provide a comprehensive response to this Report in accordance with Standing Order 109.

A copy of the relevant Minutes of Proceedings and Evidence of the Standing Committee on Environment and Sustainable Development (*Issues Nos. 34 to 78, 80 and 81, which includes this report*) is tabled.

Respectfully submitted,

CHARLES CACCIA, M.P., FOR DAVENPORT

Chair

Standing Committee on the Environment and Sustainable Development

Report on the CEPA Review Dissenting opinion of the Official Opposition

1. Introduction

Over the past year Monique Guay, MP for Laurentides and Official Opposition environment and sustainable development critic, and Roger Pomerleau, MP for Anjou—Rivière-des-Prairies and deputy critic, both members of the Bloc Québécois, participated in the review of the *Canadian Environmental Protection Act* (CEPA).

They listened with great interest to all the witnesses who appeared before the Committee and noted their concerns carefully. Like the other Members of the Committee, they were struck by the seriousness of the issues raised and by the urgency of the need to develop realistic and practicable ways of rectifying CEPA's shortcomings.

The two Bloc Québécois Members of Parliament on the Committee concur in the diagnosis reached by the Committee and the many witnesses who appeared before it: that CEPA has not had the intended impact, in particular because no regulations were made under it by a succession of governments. The example of CEPA Part IV on the "Federal House" is convincing proof of this: since its coming into force in 1988, just one regulation and one set of guidelines have been issued.

There are many reasons for this state of affairs. CEPA has been criticized for being too vague in some places and too restrictive in others. There is overlap and contradiction between CEPA and other federal and provincial laws. And it is obvious that whatever the legal force of environmental legislation, the political will to enforce its provisions remains the essential factor for its success. The fact that since it was proclaimed CEPA has given rise to only a small — and dwindling — number of prosecutions (no more than a hundred in all) suggests to the Official Opposition Members on the Committee that the political will has been lacking.

While the Bloc Québécois Members may agree with the rest of the Committee on the diagnosis and on some of the causes of CEPA's disappointing performance, they disagree profoundly with the solutions proposed by the majority for improving the effectiveness of CEPA and of the management of environmental issues generally. They consider that the Committee majority took advantage of the CEPA review to try to impose federal control over environmental action, and even to propose centralization of powers. The Committee report treats the provinces like supporting actors who need Ottawa's direction. It entirely disregards provincial achievements

and responsibility, and bases its centralizing arguments on the hypothesis — a doubtful one, to say the least — that current and future federal governments will have not only the legal and constitutional capacity but also the political will and courage to assume the leadership role the Committee majority wishes to assign to them.

The Bloc Québécois Members are convinced that a federal government that would take an attitude as aggressive as that proposed by the Committee majority would create a climate of confrontation with the provinces in which both the environment and the public would be ill-served.

For all these reasons the Bloc Québécois Members feel obliged to table a dissenting report in which they will elaborate solely on this aspect of their differences of opinion with the majority report.

They will begin with an overview of the role of the federal government in environmental matters and the concomitant scope of CEPA. They will look briefly at the theme of the “Federal House”. They consider that on this topic the Committee majority once again displayed a paternalistic attitude toward the provinces. They will then look at the framework for federal-provincial relations in environmental matters.

2. Centralization and the Environment: A Guarantee of Efficiency?

Like the other Members of the Committee, the Bloc Québécois’s representatives consider that the question of the extent of the federal government’s role in environmental protection is crucial in determining CEPA’s scope. To evaluate the government’s role the Committee uses eight indicators, all of which, not surprisingly, prove that the federal government should play the leading role.

The Official Opposition Members on the Committee consider that the Committee’s analysis is biased and that its bias distorts the entire report, because it entails from the outset a definition of the role of the federal government that is neither realistic nor desirable.

(a) Public opinion

The Committee sees public opinion as favourable to the federal government’s taking the lead in environmental protection in Canada. It considers that the views of the witnesses it heard, and the results of “polls” (the majority report mentions only one, dating from 1993 and concerned primarily with the connection between the environment and the economy), prove that this is the case.

First of all, the Bloc Québécois Members on the Committee are amazed that “public opinion”, as measured by a poll, would be used as an indicator of what the federal government’s role

should or should not be. Polls are undoubtedly an important instrument for public decision-makers. However, the Bloc Québécois Members firmly believe that polls cannot and must not replace a clear political program and the results of a general election. Public opinion is too volatile, and polls are too imprecise and capricious, for a single sounding taken two years ago in the middle of an election campaign to be considered today as final and immutable.

Moreover, the Bloc Québécois Members consider that the position of democratically elected provincial governments is just as legitimate as, and even more so than, any poll. It would be very surprising indeed if all the provincial governments were unanimous on the need for national standards imposed by the federal government.

The Bloc Québécois Members are convinced that inter-jurisdictional overlap and duplication must be reduced, but they do not believe that the way to achieve this is through greater federal involvement in areas of provincial jurisdiction.

(b) Legal and political division of powers

The Bloc Québécois Members are aware that the environment is not one of the areas of jurisdiction explicitly assigned by the Constitution to one or other level of government. It is what is known as an “ancillary power”, arising from those areas that are explicitly referred to in the Constitution.

However, the Bloc Québécois Members are of the opinion that, despite the Constitution’s silence on the environment, the provinces’ role has in the past been predominant and should remain so.

It seems obvious that the important broad powers granted to the provinces that have a direct link with the environment are more numerous than those granted to Ottawa. Consider, for example, provincial powers in the areas of industry, urban development, natural resources, farming, mining, housing, etc. The federal government certainly has important powers too, but they are clearly less numerous, more fragmented and more specific¹: for example, fisheries, navigation, transportation and federal lands.

Until the late 1980s the federal government seemed to share this view, judging by Environment Canada’s own words in 1990-91:

¹ Maître François Chevette, remarks at a symposium on Quebec’s political status and environmental protection, organized by the CQDE, Montreal, March 18, 1995.

“It is up to the provinces to resolve most environmental and resource-use questions arising within their own borders. The federal government is responsible for matters that are clearly under its jurisdiction, and for matters that the provinces cannot handle for themselves easily or at a reasonable cost.”²

According to Professor Lorne Giroux of Laval University, it was in fact with the utmost reluctance that the federal government agreed to intervene in the area of environmental assessments at all. Until *Friends of the Oldman River v. Canada* came to court, the federal government fought doggedly not to apply the order it had itself made, requiring it to undertake environmental assessments³.

These two examples show that while the federal government’s involvement in the environment may have a certain basis in law, it also needs a political basis. The Bloc Québécois Members firmly believe that in the current federal context Ottawa’s intervention should, as in the past, be limited. The Committee recognizes too that defining federal responsibilities is as much a constitutional as a political matter, but this recognition, which it presumably regards as irrelevant, does not seem to have had any influence in the definition of the federal role that the Committee tries to formulate.

What is more, the Official Opposition wishes to point out that an aggressive attitude on the federal government’s part, as favoured by the Committee, would lead inevitably to arm-wrestling in the courts. According to the Committee, “the constitutional division of powers provides considerable latitude in defining the federal government’s role in environmental protection”.⁴ The dissenting Members would like to point out that if the federal government decided to adopt this stance and push its environmental activity to the legal limit, it would without any doubt come up against opposition from the provinces, and particularly from Quebec, which, it should be recalled, has traditionally taken the initiative and been pro-active in the area of the environment.

The Bloc Québécois Members deplore the fact that the current Canadian government already seems to have adopted this confrontational attitude, as evidenced by its announcement that it would appeal the recent decision of the Quebec Court of Appeal which found the interim order on PCB-contaminated wastes unconstitutional.

(c) The ecosystem approach and levels of decision-making

Here again the majority of Members on the Committee chose to ignore the Canadian political and constitutional context in calling for the resolution of environmental problems at the level

² Environment Canada, 1990-91 Estimates, Government of Canada, p. 2-18.

³ Maître Lorne Giroux, remarks at a symposium on Quebec’s political status and environmental protection, organized by the CQDE, Montreal, March 18, 1995.

⁴ Committee Report, p. 6.

at which they arise. This would mean that strictly local problems (solid waste management, bottle recycling, etc.) would be handled by the provinces and municipalities while all the problems that overlap administrative borders (as the Committee calls interprovincial borders) would be handled by the federal government.

First of all, the Bloc Québécois Members wish to point out that a strict application of this principle would entail a major restructuring of federal and provincial responsibilities, the impact of which has not been analyzed by the Committee.

Second, the Bloc Québécois Members regret that the Committee excluded from the start all arguments in favour of greater decentralization of powers over the environment. Instead it used the concept of the ecosystem as a stalking-horse to justify centralization. It may seem logical to base the administrative model on environmental realities, but this logic has its limits, and the Official Opposition Members would like to point out that Canada is no more a single ecosystem than any of the provinces are. International agreements are valuable because they make it possible to consider environmental issues from a broader perspective (the ecosystem approach). Why could the provinces not follow suit and negotiate interprovincial and international agreements that would make it possible to reach the same results?

The Bloc Québécois Members want to condemn the Committee's different approach toward the provinces and toward Aboriginal governments. When it is a question of imposing federal leadership on the provinces, the Committee is all for the ecosystem approach, but in the chapter on Aboriginal peoples and environmental protection (Chapter 12), the Committee hails with enthusiasm the possibility of reaching self-government agreements that would include environmental management agreements. The Committee even goes so far as to suggest that such agreements could cover areas as broad as the prohibition or control of dangerous substances, the control or prohibition of activities that adversely affect public health, protection of land and natural resources, and so on.⁵ While the Official Opposition is gratified by Ottawa's openness to decentralization in the case of Aboriginal governments, it wants Ottawa to display the same openness in the case of provincial governments as well.

Like the rest of the Committee, the Bloc Québécois Members favour Aboriginal self-government. They consider that local governments, and still more the provinces, are capable of taking effective action to protect the environment, of formulating their own standards and of concluding agreements with other governments. Unlike the rest of the Committee, the Bloc Québécois Members are convinced that this reasoning applies equally to both provincial and Aboriginal governments.

⁵ Committee Report, p. 307.

(d) International issues

The Bloc Québécois Members recognize that international environmental agreements are increasingly important and that in the future they will be even more closely connected with economic agreements. They regard this trend as a positive one, and are pleased that it will mean a certain upward levelling of worldwide environmental protection standards.

The Bloc Québécois Members realize that the federal government has the constitutional power to make commitments and negotiate agreements at the international level. However, they wish to observe that it is the provinces that in most cases must take the concrete action to achieve the objectives to which Canada commits itself. This is why it is imperative that the federal government work closely with the provinces in defining the level of Canada's commitments.

Moreover, the Official Opposition Members wish to point out that the provinces already sign international agreements. Since 1964, Quebec has signed about 400 of them, with 70 different sovereign states and a dozen international organizations. In the area of the environment the provinces could, and even should, become signatories to international agreements, since they have the power to do so (especially in sectors that clearly come under their exclusive responsibility, such as waste management), know their own environment best, and are in the best position to make realistic commitments that correspond to their willingness and ability to act.

(e) Overlap, duplication and economies of scale

Generally speaking, the Committee supports the concept of a dual safety net. In contrast, the Bloc Québécois Members believe that shared jurisdiction, overlap, duplication and, in some cases, federal government encroachment, have numerous adverse effects:

They result in higher costs, both for the private sector which must satisfy two sets of requirements, and for taxpayers who must absorb the cost of two environment departments.

They reduce the degree of accountability of both orders of government by substantially complicating the process of assigning responsibility. (Consider, for example, the issue of greenhouse gas emissions: the Minister of the Environment has accused the provinces of being responsible for Canada's poor performance in this area.) This problem is further compounded by the federal government's desire to enter into administrative agreements that would enable it to shift its enforcement responsibilities on to some other level of government. Agreements of this nature draw a distinction between political, legal and administrative responsibilities. Furthermore, as the Committee majority observed, administrative agreements lead to an

erosion of environmental standards. The Bloc Québécois Members doubt whether it is possible to establish specific criteria which would guarantee the ratification of administrative agreements that would not jeopardize environmental protection standards.

They open the door for polluters to play one level of government off against another and to take advantage of the inevitable regulatory inconsistencies.

They further complicate the process of implementing solutions which could prove to be effective in one province, but impossible to apply in another. For instance, some environmentalists have stated that it would be impossible to bring in a Canada-wide fuel tax, even though it would be possible to do so in Quebec where such a tax would have much less of an impact. It has also been mentioned that Quebec's efforts in the area of forestry management are being undermined because, on the international level, Quebec's reputation has been tarnished by association with the other Canadian provinces that have a poor environmental record.

They make it difficult for the federal government to enter into international agreements, a) because the provinces have conflicting interests and b) because they do not have to reach a consensus among themselves before international agreements are ratified.

They make it difficult for citizens and communities to participate in environmental matters since they must try to pick their way through a maze of regulations.

Canada's experience with environmental issues has shown that the presence of a dual safety net is no guarantee that contradictions will not surface or that excessive regulations will not be introduced. Only in unitary states has a dual safety net led to enhanced environmental protection.

(f) Limited resources

In the opinion of the Committee, responsibility for environmental matters should be allocated first and foremost on the basis of political and legal considerations, rather than on the basis of the resources currently available. This distinction is very useful to the extent that the current administration has not made the environment one of its budget priorities.

The Bloc Québécois Members believe there is a contradiction between the Committee's desire to assign a leadership role in environmental issues to the federal government and the ongoing reductions in the size of the Department of the Environment. The Committee seems to contend that budget cuts are linked to the current state of the economy, a claim refuted by the dissenting Committee Members.

In fact, the Bloc Québécois Members believe that the Canadian government's financial position will continue to be shaky for many years to come, and that this will further accentuate the federal government's propensity to enter into administrative agreements with the provinces so that the provinces can enforce Ottawa's national standards. Under the circumstances, centralizing environmental initiatives in Ottawa could potentially be a source of even greater conflict.

Moreover, as seen in Bill C-62 on regulatory effectiveness, the government's disastrous budgetary situation, coupled with moves to centralize powers, will prompt it to set up mechanisms aimed at reducing the costs associated with regulatory management and at giving private enterprise the latitude to self-regulate. As many environmental groups pointed out, the casualties of this process would likely be the environment and the health of Canadians and Quebeckers.

(g) Liberal commitments

The Members of the Official Opposition have observed that the overall tone of the report is quite consistent with the philosophy of this administration which endorses imposing national standards on the provinces, and at the same time treating the provinces as minor players who, because of an historical error, have been given a role to play in the decision-making process.

3. The Federal House

a) Application of provincial standards at the federal level

Once again, the Committee has shown that it is unduly distrustful of the way in which the provinces manage the environment. It is implying that the provinces have adopted minimum standards which the federal government could easily surpass in the long term.

The Bloc Québécois Members deplore this attitude and feel the Committee should have demanded that the government force its departments, agencies and Crown corporations to comply as quickly as possible with the toughest provincial laws and standards.

(b) Environmental management plan

The Bloc Québécois Members were especially surprised to see the Committee focus so intently on Bill C-83, draft legislation providing for the appointment of a Commissioner of the Environment. This bill has not yet cleared the report stage in committee, when the shortcomings noted could have been corrected.

The Committee is highly critical of the bill and of its definitions which it does not find particularly useful and feels will give rise to very superficial strategies.

The Official Opposition Members reserve judgment on the creation of the position of Commissioner of the Environment. Nevertheless, they agree that before new legislative measures are included in CEPA to offset the shortcomings of the Commissioner of the Environment, some consideration should be given to making this position useful, since that it will cost Canadian taxpayers nearly \$8 million over the next three years.

4. Federal-provincial Relations Framework

It is almost ironic to hear the Committee speak of harmony between the provinces and the federal government. In fact, the Committee majority concedes that the Canadian Council of Ministers of the Environment (CCME) has spontaneously taken on a predominant role in relation to the Federal-Provincial Advisory Committee (FPAC), but it feels that this situation should be reversed.

Three reasons may explain the CCME's current predominant status: one, it provides a forum in which each province can discuss issues as an equal partner with the federal government; two, within this forum, the federal government cannot impose its own will, and three, it serves as a political decision-making body.

The Federal-Provincial Advisory Committee, as its name implies, is an advisory body or, in other words, an instrument that allows the federal government to sound out the views of the provinces. It should come as no surprise then that the provinces prefer to participate in the activities of the CCME rather than appear before the FPAC, a fact that is noted in the majority report.

That the Committee wants the federal government and the provinces to devote more time to the study of issues related to CEPA is a noble objective. However, the Committee also recommends that the FPAC continue to function. The Bloc Québécois Members believe that, since experience has shown the CCME to be the more effective tool and to be more popular among the participating provinces, it should be retained and a recommendation should be made to the federal government asking it to use its influence to have its concerns included in the CCME's agenda.

5. Conclusion

The Bloc Québécois Members reject the Committee's report in its entirety because it advocates a centralizing approach to environmental management in Canada and because it is unfairly biased against the provinces.

The Bloc Québécois Members reject the idea of a dual safety net and believe that the environmental cause would be better served if responsibility for environmental protection were assigned to a single level of government. In a sense, the Committee is of the same view since it proposes that the federal government take the lead in environmental matters and that the provinces be relegated to merely carrying out decisions. The Bloc Québécois Members reject this recommendation. They strongly believe that the provinces, and Quebec in particular, have a much broader knowledge of the specific characteristics of their natural environments, that they are in a better position to kindle local interest and participation, that they are more receptive to the demands of groups, that they are capable of entering into important agreements with their national and international partners, and finally, that they have demonstrated their desire to find solutions to environmental challenges and to contribute to sustainable development.

Monique Guay, MP for Laurentides

Roger Pomerleau, MP for Anjou—Rivières-des-Prairies

MINUTES OF PROCEEDINGS

TUESDAY, JUNE 13, 1995
(141)

[Text]

The Standing Committee on Environment and Sustainable Development met *in camera* at 9:00 o'clock a.m. this day, in Room 705, La Promenade, the Chairman, Charles Caccia, presiding.

Members of the Committee present: Peter Adams, Charles Caccia, Paul DeVillers, Paul Forseth, Monique Guay, Karen Kraft Sloan, Clifford Lincoln and Roger Pomerleau.

In attendance: From the Research Branch of the Library of Parliament: Pascale Collas, Thomas Curran, Monique Hébert and Margaret Smith, Research Officers. *From Resource Futures International:* John Moffet, Principal.

Pursuant to its Order of Reference dated June 10, 1994: The Committee resumed consideration of a review of the Canadian Environmental Protection Act (CEPA). (*See Minutes of Proceedings and Evidence dated Tuesday, June 14, 1994, Issue No. 34*).

At 12:25 o'clock p.m., the sitting was suspended.

At 1:00 o'clock p.m., the sitting resumed.

It was agreed,—That the Report be entitled: Our Health Towards Pollution Prevention—CEPA Revisited.

It was agreed,—That the Terms of Reference, the list of witnesses and the list of briefs received be appended to the Report.

It was agreed,—That the Committee request a Government Response to the Report pursuant to Standing Order 109.

It was agreed,—That the draft report, as amended, be adopted as the Committee's Fifth Report to the House and that the Chair present it to the House.

It was agreed,—That the Chairperson be authorized to make such grammatical and editorial changes to the Report as may be necessary without changing the substance of the Report.

It was agreed,—That the Committee print 4,200 copies in English and 800 in French of its Report.

It was agreed,—That a News Release be issued and a News Conference, including a lock-up, be organized.

At 2:45 o'clock p.m., the Committee adjourned to the call of the Chair.

A copy of the relevant Minutes of Proceedings and Evidence of the Standing Committee on Environment and Sustainable Development (*Issues nos. 34 to 78, 80 and 81 which includes this report*) is tabled.

Normand Radford

Clerk of the Committee

